

142 FERC ¶ 63,011  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

San Diego Gas & Electric Company

Docket No. EL00-95-248

v.

Sellers of Energy and Ancillary Services  
Into Markets Operated by the California  
Independent System Operator Corporation  
and the California Power Exchange

INITIAL DECISION

(Issued February 15, 2013)

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**PHILIP C. BATEN**, Presiding Administrative Law Judge

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## PART 1

### INTRODUCTION

#### I. Decision

1. The Complainants<sup>1</sup> in this matter have proved a *prima facie* case by a preponderance of the evidence that certain Respondents, as indicated in this Initial Decision, committed various tariff and other violations that affected the market clearing price in the California organized electric markets during the Summer Period.<sup>2</sup> These tariff and other violations are:

- Type II Anomalous Bidding Violations
- Type III Anomalous Bidding Violations
- False Export Violations
- False Load Scheduling Violations
- Selling Ancillary Services Without Market-Based Rate Authority

2. The Complainants in this matter have proved by a preponderance of the evidence that transactions during the Refund Period<sup>3</sup> involving certain Respondents, as indicated in this Initial Decision, require mitigation. This Initial Decision determines a mitigation methodology and applies it to the transactions to calculate refund amounts. These transactions and the respective refund amounts are:

- Forward Transactions: \$45,270,367
- Energy Exchange Transactions: \$45,637,788

#### II. Background and Procedural History

3. This hearing commenced April 11, 2012, and concluded July 19, 2012, resulting in a transcript that exceeds 10,000 pages and nearly 1,000 exhibits. The parties and

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<sup>1</sup> The People of the State of California, *ex rel.* Kamala D. Harris, Attorney General of the State of California; the Public Utilities Commission of the State of California; Pacific Gas and Electric Company; and Southern California Edison Company.

<sup>2</sup> The Summer Period is May 1, 2000 to October 1, 2000.

<sup>3</sup> The Refund Period is October 2, 2000 to June 20, 2001.

participants in this proceeding numbered 26 in all. They are commended for their extraordinary professional conduct, experienced advocacy, and intellectual skills, which were critical for a fair adjudication. A resolution of this highly contentious matter would not have otherwise been possible.

4. This case is before the Presiding Judge by way of a remand from the United States Court of Appeals for the Ninth Circuit (Ninth Circuit) to the Federal Energy Regulatory Commission (Commission).<sup>4</sup> The case began its long arduous journey in August 2000 when San Diego Gas & Electric Company (SDG&E) filed a complaint with the Commission seeking a cap on the escalating wholesale energy prices in California during the Crisis Period.<sup>5</sup> The remand expanded the scope of the California energy crisis refund proceedings to also include the following issues requiring further consideration by the Commission: (1) whether relief is warranted for possible tariff violations which were committed prior to October 2, 2000; and (2) whether relief is appropriate for forward market transactions and energy exchange transactions that were previously excluded from the scope of the prior refund proceeding.<sup>6</sup>

5. Based on the instructions from the Ninth Circuit, the Commission established the issues for hearing in this proceeding in the November 19, 2009, Order on Remand (Remand Order)<sup>7</sup> and the May 26, 2011, Order on Requests for Rehearing and Clarification, and Motions to Dismiss (Rehearing Order).<sup>8</sup> On November 2, 2012, the

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<sup>4</sup> *Pub. Utils. Comm'n of Cal. v. FERC*, 462 F.3d 1027 (9th Cir. 2006) (*CPUC Decision*). The Ninth Circuit issued its mandate for Commission action on this remand on April 15, 2009. *See Pub. Utils. Comm'n of Cal. v. FERC*, No. 01-71051, slip op. (9th Cir. Apr. 15, 2009).

<sup>5</sup> *CPUC Decision*, 462 F.3d at 1041. The energy crisis in California occurred from May 1, 2000, through June 20, 2001, and is commonly called the Crisis Period.

<sup>6</sup> *Id.* at 1035.

<sup>7</sup> *San Diego Gas & Elec. Co. v. Sellers of Energy & Ancillary Servs.*, 129 FERC ¶ 61,147 (2009) (Remand Order).

<sup>8</sup> *San Diego Gas & Elec. Co. v. Sellers of Energy & Ancillary Servs.*, 135 FERC ¶ 61,183 (2011) (Rehearing Order).

Commission also issued an Order Denying Requests for Rehearing and Clarification (November 2012 Denial Order).<sup>9</sup>

6. Collectively, the Remand Order and the Rehearing Order instructed the Presiding Judge to make factual determinations on three issues with regard to wholesale spot market sales<sup>10</sup> of electricity during the Summer Period:

(1) which market practices and behaviors constitute a violation of the then-current CAISO,<sup>11</sup> CalPX,<sup>12</sup> and individual seller's tariffs and Commission orders;

(2) whether any of the sellers named as respondents in this proceeding engaged in those tariff violations; and

(3) whether any such tariff violations affected the market clearing price.<sup>13</sup>

In addition, the Commission stated that when it receives these factual determinations from the Presiding Judge, the Commission will decide the further steps to be taken.<sup>14</sup>

7. The collective Commission orders also set for hearing the forward transactions and energy exchange transactions that occurred during the Refund Period. Specifically, the Commission "instruct[ed] the ALJ [Presiding Judge] to determine which forward

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<sup>9</sup> *San Diego Gas & Elec. Co. v. Sellers of Energy & Ancillary Servs.*, 141 FERC ¶ 61,087 (2012) (November 2012 Denial Order).

<sup>10</sup> Defined as "sales that are 24 hours or less and that are entered into the day of or day prior to delivery." *San Diego Gas & Elec. Co. v. Sellers of Energy & Ancillary Servs.*, 95 FERC ¶ 61,418, at 62,545 n.3 (2001); *see also CPUC Decision*, 462 F.3d at 1038.

<sup>11</sup> This abbreviation is common for the "California Independent System Operator."

<sup>12</sup> This abbreviation is common for the "California Power Exchange Corporation."

<sup>13</sup> Rehearing Order, 135 FERC ¶ 61,183 at P 31.

<sup>14</sup> Remand Order, 129 FERC ¶ 61,147 at P 3.

market transactions are subject to mitigation and to calculate the refunds”<sup>15</sup> and separately “instruct[ed] the ALJ [Presiding Judge] to propose a refund methodology [that would be] applicable to energy exchange transactions and to calculate the refunds.”<sup>16</sup>

8. In addition to these proceedings, a plethora of separate but related Commission proceedings have addressed issues stemming from the California energy crisis dating back more than a decade. Some of the most pertinent decisions to the case at hand include the Commission order that initially established the scope and methodology to calculate refunds as related to certain transactions during part of the energy crisis (July 2001 Order),<sup>17</sup> a 2003 Commission order addressing the proposed findings of one presiding judge on refund liability (March 2003 Order),<sup>18</sup> and a 2003 order initiating seller-specific investigations into allegations of gaming (Gaming Order).<sup>19</sup>

9. On August 27, 2012, a partial initial decision was issued in this matter granting motions for summary disposition that were filed by Avista Corporation (Avista Corp.) (d/b/a Avista Utilities, f/k/a Washington Water Power), Mico, Inc. (Mico), and Shell Martinez Refining Company (Shell Martinez).<sup>20</sup> The partial initial decision dismissed

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<sup>15</sup> *Id.* P 28. The Remand Order inadvertently referred to “block forward market transactions” instead of “forward transactions,” however the Rehearing Order corrected the terminology accordingly. Rehearing Order, 135 FERC ¶ 61,183 at P 40.

<sup>16</sup> Remand Order, 129 FERC ¶ 61,147 at P 30.

<sup>17</sup> *San Diego Gas & Elec. Co. v. Sellers of Energy & Ancillary Servs.*, 96 FERC ¶ 61,120 (2001) (July 2001 Order).

<sup>18</sup> *San Diego Gas & Elec. Co. v. Sellers of Energy & Ancillary Servs.*, 102 FERC ¶ 61317 (2003) (March 2003 Order).

<sup>19</sup> *Am. Elec. Power Serv. Corp.*, Order to Show Cause Concerning Gaming and/or Anomalous Market Behavior, 103 FERC ¶ 61,345 (2003) (Gaming Order), *order on reh'g*, 106 FERC ¶ 61,020 (2004).

<sup>20</sup> *San Diego Gas & Elec. Co. v. Sellers of Energy & Ancillary Servs.*, 140 FERC ¶ 63,015 (2012) (Partial Initial Decision Granting the Motion of Certain Respondents for Summary Disposition).



these parties on the ground that no issue of material fact remains against them with respect to any claims.<sup>21</sup> The Commission affirmed this partial initial decision.<sup>22</sup>

10. The parties remaining in this case are:

**Complainants:**

- The People of the State of California ex rel. Kamala D. Harris, Attorney General
- Public Utilities Commission of the State of California
- Pacific Gas and Electric Company
- Southern California Edison Company

**Other Parties and Participants:**

- California Department of Water Resources, on behalf of State Water Project<sup>23</sup>
- Californians for Renewable Energy, Inc. (CARE)
- Salt River Project Agricultural Improvement and Power District (Salt River)<sup>24</sup>
- Trial Staff of the Federal Energy Regulatory Commission (Staff)

**Respondents for the Summer Period:**

- APX, Inc. (APX) (f/k/a Automated Power Exchange)<sup>25</sup>
- Avista Corporation (Avista Corp.) (d/b/a Avista Utilities, f/k/a Washington Water Power)

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<sup>21</sup> *Id.* P 1.

<sup>22</sup> *San Diego Gas & Elec. Co. v. Sellers of Energy & Ancillary Servs.*, 141 FERC ¶ 61,088 (2012).

<sup>23</sup> This entity is a Summer Period seller.

<sup>24</sup> On February 6, 2013, Salt River filed an Election to Become an Additional Settling Participant to the settlement as referenced *infra* note 26. This Initial Decision reserves for the Commission the authority to consider the effects of this Election on any final relief that may be ordered by the Commission for Salt River.

<sup>25</sup> On February 8, 2013, APX filed a Notice of Election to join the settlement as referenced *infra* note 26. This Initial Decision reserves for the Commission the authority to consider the effects of this Election on any final relief that may be ordered by the Commission.

- Avista Energy, Inc. (Avista Energy)
- Bonneville Power Administration (BPA)
- California Polar Power Brokers, LLC (California Polar)<sup>26</sup>
- Hafslund Energy Trading L.L.C. (Hafslund)
- Illinova Energy Partners, Inc. (Illinova)
- Koch Energy Trading, Inc. (Koch)
- Mieco, Inc. (Mieco)
- MPS Merchant Services, Inc. (MPS) (f/k/a Aquila Power Corporation)<sup>27</sup>
- Powerex Corp. (Powerex)
- Shell Energy North America (US), L.P. (Shell Energy) (f/k/a Coral Power, L.L.C.)
- Shell Martinez Refining Company (Shell Martinez)
- Sunlaw Cogeneration (Sunlaw)
- TransAlta Energy Marking (U.S.) Inc. & TransAlta Energy Marking (California) Inc. (collectively, TransAlta)
- Western Area Power Administration (WAPA)

**Respondents for the Refund Period Energy Exchanges:**

- Avista Energy
- BPA
- Powerex
- WAPA

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<sup>26</sup> On October 31, 2012, the California Parties filed a settlement agreement with the Commission that would resolve all issues with this party. California Parties Reply Br. at 1 n.4. The Commission issued an order approving this uncontested settlement on February 1, 2013. *San Diego Gas & Elec. Co. v. Sellers of Energy & Ancillary Servs.*, 142 FERC ¶ 61,083 (2013). This Initial Decision proceeds to make findings with respect to this party and reserves for the Commission the authority to consider the effects of the settlement agreement on any final relief that may be ordered by the Commission.

<sup>27</sup> On February 8, 2013, MPS filed a Notice of Election to join the settlement as referenced *supra* note 26. This Initial Decision reserves for the Commission the authority to consider the effects of this Election on any final relief that may be ordered by the Commission.

**Respondents for the Refund Period Forward Transactions:**

- Constellation NewEnergy, Inc. (Constellation)<sup>28</sup>
- BPA
- Powerex

11. The tortuous factual background of the California energy crisis that underpins this proceeding is lengthy and complex. Numerous prior decisions have recounted this arduous history in great detail and are available for reference and review.<sup>29</sup> Therefore, the background statement in this Initial Decision has been truncated.

**PART 2****FINDINGS OF FACT AND CONCLUSIONS OF LAW****FOR THE SUMMER PERIOD****I. Summer Period Introduction and Analysis Framework**

12. For the Summer Period the Commission has outlined the construct of a *prima facie* case in this matter, from which the Presiding Judge will determine: “(1) which market practices and behaviors constitute a violation of the then-current CAISO, CalPX, and individual seller’s tariffs and Commission orders; (2) whether any of the sellers named as respondents in this proceeding engaged in those tariff violations; and (3) whether any such tariff violations affected the market clearing price.”<sup>30</sup>

13. This Initial Decision finds that in those instances where the Complainants satisfied the *prima facie* elements, such a showing established a rebuttable presumption of liability that the Respondents had a duty to negate. The burden of proof framework and the

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<sup>28</sup> On February 8, 2013, Constellation filed a Notice of Election to join the settlement as referenced *supra* note 26. This Initial Decision reserves for the Commission the authority to consider the effects of this Election on any final relief that may be ordered by the Commission.

<sup>29</sup> See, e.g., *City of Redding v. FERC*, 693 F.3d 828, 831-34 (9th Cir. 2012) (Factual and Procedural Background); *CPUC Decision*, 462 F.3d at 1036-45 (Factual Background); *Pacific Gas & Elec. Co. v. United States*, 105 Fed. Cl. 420, 423-31 (2012) (Introduction and Findings of Fact, FERC Litigation).

<sup>30</sup> Rehearing Order, 135 FERC ¶ 61,183 at P 31.

associated evidentiary submissions are discussed in section VI of part 2 of this Initial Decision.

14. Regarding the third *prima facie* element that addresses the issue of the price effects of the established violations, the Complainants devised a methodology in which their expert Dr. Fox-Penner evaluated each tariff violation on an individualized basis to test whether it affected the market clearing price. This Initial Decision finds that this methodology and its design showing the price effects in isolation constitute an accurate and reasoned approach that complies with the Commission's directive for this element of a *prima facie* case. The Complainants tailored this price effects methodology to meet the unique characteristics of each transaction type that was evaluated. Whether the price effects were demonstrated is addressed within the respective sections for each violation category. This Initial Decision adopts the proof of the Complainants that of the approximately 34,020 violations which were evaluated for price effects, more than 20,000 are found to have affected the market clearing price.<sup>31</sup> Additionally, part 2 of this Initial Decision concludes with a discussion of marginal cost, opportunity cost, and the mitigated market clearing price (MMCP), and their relationship to the Summer Period findings.

## **II. Anomalous Bidding**

### **A. Definitions and Categories of Anomalous Bidding**

15. In the newly created California organized single price auction markets, anomalous bids played a significant role to cause an increase in the market clearing prices. No matter how low or how high a bid was for a bidding hour, the resulting market clearing price for a particular bidding hour was the price that all bidders received for their bids. This bidding system is called a single price auction. All bids were accumulated in a stack known as the Balancing Energy and Ex Post (BEEP) stack. The CAISO then dispatched the energy, which these bids represented, from the lowest price to highest price until all energy requirements for that hour were satisfied. This process served to set the market clearing price in the auction and all bidders received this new price, even those bidders who had bid below the resulting market clearing price. This system provided an incentive for bidders to keep the BEEP high by anomalous bidding practices. As one energy trader said: "TRY AND KEEP THAT DAMN BEEP UP!"<sup>32</sup>

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<sup>31</sup> Ex. CAX-310 at 10 tbl.1 (2nd revised version).

<sup>32</sup> Ex. CAX-110 at 24 (revised Mar. 26, 2012).

16. Anomalous bidding behavior is prohibited by the CAISO Market Monitoring and Information Protocol (MMIP). These rules outline the appropriate market behavior for participants in the CAISO's organized auction market. Some Respondents argue that these rules serve merely as guidance and do not constitute a strict prohibition nor provide a right of action in complaint proceedings such as the instant matter. However, the Commission has previously determined that these rules are enforceable, stating that "as part of a filed tariff, the MMIP ultimately is for the Commission to interpret and enforce, and the MMIP itself recognizes that the Commission is the ultimate enforcement authority."<sup>33</sup>

17. Anomalous Bidding is defined as bidding behavior that departs from normal competitive behavior in violation of the CAISO MMIP, specifically section 2.1.1 addressing "Anomalous Market Behavior" and section 2.1.3 addressing "Gaming," and their respective subsections.<sup>34</sup> The relevant provisions are listed below:

**MMIP 2.1.1 Anomalous Market Behavior**

Anomalous market behavior, which is defined as behavior that departs significantly from the normal behavior in competitive markets that do not require continuing regulation or as behavior leading to unusual or unexplained market outcomes. Evidence of such behavior may be derived from a number of circumstances, including:

- MMIP 2.1.1.1** withholding of Generation capacity under circumstances in which it would normally be offered in a competitive market;
- MMIP 2.1.1.2** unexplained or unusual redeclarations of availability by Generators;
- MMIP 2.1.1.3** unusual trades or transactions;
- MMIP 2.1.1.4** pricing and bidding patterns that are inconsistent with prevailing supply and demand conditions, *e.g.*, prices and bids that appear

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<sup>33</sup> Gaming Order, 103 FERC ¶ 61,345 at P 20.

<sup>34</sup> Ex. CAX-100 at 1031-32 (CAISO MMIP §§ 2.1.1, 2.1.3).

consistently excessive for or otherwise inconsistent with such conditions; and

**MMIP 2.1.1.5** unusual activity or circumstances relating to imports from or exports to other markets or exchanges....

**MMIP 2.1.3     Gaming**

“Gaming” or taking unfair advantage of the rules and procedures set forth in the [Cal]PX or [CA]ISO Tariffs, Protocols or Activity Rules, or of transmission constraints in periods in which exist substantial Congestion, to the detriment of the efficiency of, and of consumers in, the ISO Markets. “Gaming” may also include taking undue advantage of other conditions that may affect the availability of transmission and generation capacity, such as loop flow, facility outages, level of hydropower output or seasonal limits on energy imports from out-of state, or actions or behaviors that may otherwise render the system and the [CA]ISO Markets vulnerable to price manipulation to the detriment of their efficiency.<sup>35</sup>

18. Dr. Carolyn Berry, the expert for the Complainants, observed three types of anomalous bids that she found to be prevalent during the Summer Period. These bids were primarily submitted by generators and power marketers. Dr. Berry examined the Respondents’ bids in the CAISO real time market for each of the 3,696 hours of the Summer Period.<sup>36</sup> She found that the Respondents committed thousands of anomalous

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<sup>35</sup> *Id.* at 1031-32.

<sup>36</sup> Dr. Berry did not assess bids in the CalPX market. She surmised that anomalous bidding may have occurred in the CalPX day ahead market and CAISO ancillary services capacity markets. However, she limited her analysis to the CAISO real time energy market, which was the last market to clear. This approach eliminated considering anomalous bidding when the energy had the opportunity to be accepted in a subsequent auction at a potentially higher price. *See* Ex. CAX-110 at 11, 14 (revised Mar. 26, 2012).

bidding tariff violations and that these violations took place in most of the hours of the Summer Period.<sup>37</sup> The parameters of these bids are outlined below:

Type I: Bids that vary in output in ways that are unrelated to cost such as bids that change in response to supply and demand conditions that are unrelated to changes in cost. Type I bids include:

Hockey Stick Bids  
Walking cane bids  
All in bids

Type II Type II anomalous bids are bids with prices above marginal cost in combination with some other tariff violation to make the bid profitable. These anomalous bids include:

Withholding anomalous bids  
False Export anomalous bids  
False Load anomalous bids

Type III Bids used to effectuate supply withholding, a.k.a., economic withholding.<sup>38</sup>

19. Dr. Berry developed screens to capture the pattern of these bidding violations. These screens are standard, well-accepted methods to analyze bids and to identify conduct that depart from competitive behavior.<sup>39</sup>

20. **Type I** bids are identified by the shape of their bid curve. This transaction type involved bidding some portion of the megawatt hours (MWh) at extremely high prices well in excess of marginal cost. Type I bids were used to exploit a tight supply/demand balance (a small excess of supply over demand) and an inelastic demand to purposely raise prices.<sup>40</sup> These bids were “consistently excessive” and were used to exploit

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<sup>37</sup> *Id.* at 4.

<sup>38</sup> *Id.* at 16.

<sup>39</sup> Tr. at 994:6-17 & 995:3-7.

<sup>40</sup> Ex. CAX-110 at 16 (revised Mar. 26, 2012).

shortages in supply in the CAISO real time market and therefore violated sections 2.1.1 and 2.1.1.4 of the CAISO MMIP as bidding that “departs significantly from normal behavior in a competitive market.” The excessiveness of the bids was demonstrated by the fact that they were priced well in excess of marginal cost and thus did not reflect normal bidding in a competitive market.<sup>41</sup> The main effect of these bids was to raise the market clearing price in real time.<sup>42</sup> Tables 1 and 2 as contained in exhibit CAX-110 show the MWh and total hours of Type I anomalous bids that are violations of the tariffs.<sup>43</sup>

21. The subcategories of hockey stick, walking cane, and all-in bids constitute different varieties of Type I bids.<sup>44</sup> The **hockey stick** bid involved bidding a very small quantity of the bid at extremely high prices, while bidding the rest of the bid at prices closer to marginal cost. In constructing her analysis of hockey stick bids, Dr. Berry defined hockey stick bids to include those bids in which a quantity greater than zero, but less than 10 percent of the bid, was set at extremely high prices. The steep jump in bid price was not based on a jump in real costs, but was instead based on an attempt to move market clearing prices.<sup>45</sup> When the high portion of the bid was accepted, it set the market clearing price to a higher level and the seller received the higher price, not just for the quantity of the high bid, but for all of its sales that were made within the same bidding hour. A seller that submitted a hockey stick bid gambled the loss of a small quantity of sales (the high bid) against the potential win of a significant price increase for all of its sales.<sup>46</sup> As stated before, in the single price auction he would be paid the higher market clearing price for all of his bids.

22. **Walking cane** bids were similar to hockey stick bids, except that a higher quantity of the bid was offered at extremely high prices, i.e., more than 10 percent of the bid,

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<sup>41</sup> *Id.* at 18.

<sup>42</sup> *Id.* at 17.

<sup>43</sup> *Id.* at 27.

<sup>44</sup> *Id.* at 28-29 tbls. 1 & 2.

<sup>44</sup> *Id.* at 19-21 (graphical representations of bid types found in figs. 1-3).

<sup>45</sup> *Id.* at 18.

<sup>46</sup> *Id.* at 19.



despite the fact that no corresponding increase in cost to the seller had occurred. The name “walking cane” is meant to convey the image of a substantial portion of quantity offered at extremely high prices □ the handle of the cane.<sup>47</sup>

23. **All-in** bids were bids in which more than 90 percent of the bid quantity was offered at extremely high prices. These bids reflect a strategy in the game of poker, whereby a player may be willing to risk losing all his earnings in exchange for winning a big return. Here, the marketer risked making no sale at all in exchange for the potential that its bid might be accepted for an extremely high price.<sup>48</sup>

24. **Type II** anomalous bids were bids above marginal cost that were used in conjunction with other anti-competitive tariff strategies, such as **withholding** anomalous bids, **false** export anomalous bids, and **false load** anomalous bids. Combining such strategies proved to be profitable.<sup>49</sup> Type II anomalous bids violated sections 2.1.1, 2.1.1.4, and 2.1.3 of the CAISO MMIP, reflecting bidding that “departs significantly from the normal behavior in competitive markets.”<sup>50</sup> They were “consistently excessive”<sup>51</sup> and were used to exploit supply shortages in the CAISO real time market that often were artificially created by suppliers. Additionally, they constituted gaming “or taking unfair advantage of the rules and procedures set forth in the CalPX and CAISO Tariffs to the detriment of the efficiency of, and of consumers in, the CAISO Markets.”<sup>52</sup> These bids resulted in unusual and unexplained market outcomes such as inexplicably high market clearing prices which were observed during the Summer Period.

25. As mentioned above, some Type II bids contained the element of supply withholding. Under this strategy, the supplier withheld supply from the CAISO by placing bids or portions of bids that were excessively above marginal cost. This strategy

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<sup>47</sup> *Id.* at 20.

<sup>48</sup> *Id.* at 20.

<sup>49</sup> *Id.* at 33.

<sup>50</sup> Ex. CAX-100 at 1031-32.

<sup>51</sup> Ex. CAX-100 at 1031 (CAISO MMIP § 2.1.1.4).

<sup>52</sup> Ex. CAX-110 at 34 (revised Mar. 26, 2012); Ex. CAX-100 at 1032 (CAISO MMIP § 2.1.3).

is also known as “supply curve withholding” and violates the MMIP.<sup>53</sup> Table 4 as contained in exhibit CAX-110 shows the Type II withholding that occurred in total MWh and the number of hours that each Respondent had at least one withholding anomalous bid.<sup>54</sup> The withholding anomalous bid quantities are divided into those MWh that were sold to the CAISO (Procured Anomalous Bids) and those MWh that were not sold to the CAISO (Unprocured Anomalous Bids).<sup>55</sup>

26. Some Type II bids also incorporated the element of false export. A false export anomalous bid was a bid (or a portion of a bid) by a seller at a price above marginal cost during the same hour that the seller engaged in a false export. False export occurred when a participant in the market made a purchase from the CalPX and ostensibly exported the energy to a sink outside the CAISO control area and then bid that same energy into the CAISO real time market as an import. From this sequence of events, the CAISO could not discern that the energy allegedly “imported” was in fact energy originally sourced from within the CAISO. This method was often used to evade the CAISO real time price caps. The seller benefited from this strategy if CAISO real time prices were higher than the seller could have obtained by competitively selling its energy elsewhere. Above marginal cost bidding increased prices in the CAISO real time market and created the opportunity to profit from these false exports.<sup>56</sup>

27. Some Type II bids also incorporated false load anomalous bids. Here, a seller submitted a bid at a price above marginal cost during the same hour that the seller had submitted a false load schedule. This strategy was used by sellers to fraudulently move energy from the day ahead markets into real time and to sell it as uninstructed energy to receive the CAISO real time market clearing price. Similar to false export, the seller benefited from this strategy if CAISO real time prices were higher than the seller could have obtained by competitively selling its energy elsewhere. And just like false export, above marginal cost bidding increased prices in the CAISO real time market and created the opportunity to profit from this false load bidding strategy.<sup>57</sup>

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<sup>53</sup> Ex. CAX-110 at 34 (revised Mar. 26, 2012).

<sup>54</sup> *Id.* at 43 tbl.4.

<sup>55</sup> *Id.* at 39.

<sup>56</sup> *Id.* at 40.

<sup>57</sup> *Id.* at 42.

28. Some Type III anomalous bids violations also manifested economic withholding. Here, bids were set so high above the market price that it was likely that they would not be accepted, thereby either diminishing the available supply to the CAISO or increasing the market clearing price. Two types of withholding bids were present in single price auction markets, “physical withholding” and “economic withholding.” Physical withholding occurred when a seller failed to bid its energy into the market. Economic withholding occurred when a seller bid energy into the market, but at an offer price above the market price such that it was not dispatched even though the seller’s marginal cost was below the market price.<sup>58</sup> A marketer’s failure to bid supply or physically to withhold is not a part of Dr. Berry’s screens and therefore was not evaluated by her. Since physical withholding does not involve a bid or schedule, her screens would not have observed this violative behavior. However, economic withholding is a bid and therefore would appear on her screens for evaluation.

29. Dr. Berry’s analysis flags an incremental bid (or bid segment) into the CAISO real time market as an instance of economic withholding if it satisfies the following three conditions:

- 1) Bid price of the seller > ISO RT market-clearing price
- 2) Marginal cost of the seller < ISO RT market-clearing price
- 3) Procured MWh = 0.<sup>59</sup>

30. These conditions fit the definition of economic withholding. First, the seller has made a bid, which thereby demonstrates that it can provide the energy. Second, the marginal cost of the energy is less than the prevailing market price, thus the seller could make a profit selling the energy within the zone of marginal cost. Third, the bid price is above the market price, resulting in no sale of energy because the bid is not taken or dispatched by the CAISO.<sup>60</sup>

31. Unlike supply withholding, economic withholding was a discernable tariff violation since it involved a visible bid in the CAISO data screens. These bids reflect bidding that “depart[s] significantly from normal behavior in a competitive market” and led to unusual and unexplained market outcomes such as inefficient dispatch of energy to serve load and inexplicably high market clearing prices. Section 2.1.1.1 of the CAISO

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<sup>58</sup> *Id.* at 47.

<sup>59</sup> *Id.* at 49.

<sup>60</sup> *Id.* at 49.

MMIP prohibits the withholding of generation capacity under circumstances in which it would normally be offered in a competitive market. Section 2.1.3 of the CAISO MMIP prohibits “behaviors that may render the system and the ISO Markets vulnerable to price manipulation to the detriment of efficiency.”<sup>61</sup>

32. In sum, all of the anomalous bidding practices and behaviors that Dr. Berry identified directly violate the primary directive of MMIP section 2.1.1 (*i.e.*, they all depart significantly from normal behavior in competitive markets and therefore constitute anomalous market behavior).<sup>62</sup>

## **B. Proof of Anomalous Bidding Violations and Price Effects**

### **1. Type I Bids**

33. Type I bids, as discussed earlier, are tariffs violations. Dr. Berry’s screens show that Powerex, APX, BPA, Avista Energy, Shell Energy, and WAPA committed these violations and the respective number of hours throughout the Summer Period during which these violations were committed, as shown in Tables 1 and 2 in exhibit CAX-110.<sup>63</sup> The Commission further required that the Complainants show that the violations affected the market clearing price. Dr. Peter Fox-Penner served as the expert to present evidence of price effects with respect to the market clearing price. He did not perform a price effects analysis on Type I bids. Therefore, a *prima facie* case for Type I bidding violations was not established, and these allegations fail.

### **2. Type II Bids**

34. Type II bids, as discussed earlier, are tariff violations. Powerex, BPA, TransAlta, Avista Energy, MPS, and Shell Energy participated in these violations. Table 4 in exhibit CAX-110 shows the total MWh quantity of withholding anomalous bids and the number of hours that each Respondent has at least one withholding anomalous bid.<sup>64</sup> The withholding anomalous bid quantities are divided into those MWh that were sold to the

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<sup>61</sup> *Id.* at 48.

<sup>62</sup> Tr. at 2013:15-18; Ex. CAX-110 at 17, 36 (revised Mar. 26, 2012).

<sup>63</sup> Ex. CAX-110 at 28-29 (revised Mar. 26, 2012); Ex. CAX-271 (revised Mar. 26, 2012).

<sup>64</sup> Ex. CAX-110 at 43 tbl.4 (revised Mar. 26, 2012).

CAISO (Procured Anomalous Bids) and those MWh that were not sold to the CAISO (Unprocured Anomalous Bids).<sup>65</sup> Table 5 in exhibit CAX-110 shows the total number and the total MWh quantity of false export anomalous bids and the number of hours that each indicated Respondent had at least one false export anomalous bid.<sup>66</sup> The false export anomalous bid quantities are divided into those MWh that were sold to the CAISO (Procured Anomalous Bids) and those MWh that were not sold to the CAISO (Unprocured Anomalous Bids).<sup>67</sup> Table 6 in exhibit CAX-110 shows the total number and the total MWh quantity of false load anomalous bids and the number of hours for each indicated Respondent.<sup>68</sup> The violations for each hour of the Summer Period of anomalous withholding, anomalous false load, and anomalous false export bids are found in exhibits CAX-272, 273, and 274, respectively. Dr. Fox-Penner provided price effects data on these violations for all of the listed Respondents except for MPS, thus completing the Complainants' *prima facie* case with respect to this violation for all of the listed Respondents except for MPS.<sup>69</sup>

### 3. Type III Bids

35. Type III bids, as explained above, involved economic withholding and are tariff violations. Avista Energy, APX, BPA, Shell Energy, Powerex, TransAlta, MPS, and WAPA participated in these violations. A summary of these violations is presented in Tables 8 and 9 in exhibit CAX-110.<sup>70</sup> The violations for each hour of the Summer Period are found in exhibit CAX-282. Dr. Fox-Penner evaluated the price effects of these violations and presented this evidence for each trading hour for all of the listed Respondents except for MPS.<sup>71</sup> Therefore, the Complainants have met their *prima facie* burden for these violations for all of the Respondents except for MPS.

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<sup>65</sup> *Id.* at 43.

<sup>66</sup> *Id.* at 45 tbl.5.

<sup>67</sup> *Id.* at 45.

<sup>68</sup> *Id.* at 47 tbl.6.

<sup>69</sup> Ex. CAX-318; Ex. CAX-319 (revised); Ex. CAX-320 (revised).

<sup>70</sup> Ex. CAX-110 at 63 (revised Mar. 26, 2012); Ex. CAX-124 (revised).

<sup>71</sup> Ex. CAX-317 (revised).

### **III. False Export Violations**

36. The violation of false export involved a generator or marketer making a purchase of CalPX energy. The entity then exported the energy outside of the CAISO control area, ostensibly as a sale to a grid located outside of the CAISO or by parking<sup>72</sup> the energy with another generator or marketer outside the CAISO. The entity would subsequently return the same energy to the CAISO in real time, but disguised as energy sourced from outside the CAISO, when it was in fact CAISO energy all along. This process enabled the marketer either to evade the CAISO price cap on real time prices or to attain a higher real time price for the sale of this energy. The success of this process required the submission of false information to the CAISO, which in and of itself, is a violation of the tariffs. As a general proposition, false export schedules recorded fictitious energy resources that were allegedly outside the CAISO, thus allowing them to be bid back into the ancillary services markets or as supplemental energy. Therefore, the information that was provided in this transaction, both in the export schedule and in the import bid (or schedule), was fraudulent.<sup>73</sup>

37. Mr. Gerald Taylor was the expert whom the Complainants presented to prove these violations. He produced screens that detected when these transactions occurred in each trading hour during the Summer Period.<sup>74</sup> Mr. Taylor's data is presented in Table III-1 of exhibit CAX-167 and shows that Avista Energy, MPS, Shell Energy, Powerex, TransAlta, and Koch transacted false export violations during the Summer Period.<sup>75</sup> Dr. Fox-Penner provided the calculations for the price effects of these violations for all of the above Respondents except TransAlta.<sup>76</sup> With respect to these violations, the

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<sup>72</sup> The violation of Parking was generally carried out in conjunction with false export violations and false load scheduling violations. *See* California Parties Initial Br. § III.A-B. Therefore, this activity is assessed under the sections of this Initial Decision addressing those violations as appropriate.

<sup>73</sup> *See generally* Ex. CAX-001 at 40-45 (revised).

<sup>74</sup> Ex. CAX-218.

<sup>75</sup> Ex. CAX-167 at 111 (revised Mar. 28, 2012).

<sup>76</sup> Ex. CAX-316 (revised); California Parties Oct. 15, 2012 Errata to Initial Brief at 2 ("TransAlta was erroneously listed as having engaged in 'price-increasing' False Export violations.").

Complainants have met a *prima facie* case for all of the Respondents except for TransAlta.

#### **IV. False Load Scheduling**

##### **A. False Load Scheduling is a Violation**

38. False load scheduling is a violation by which “the supplier fraudulently created a positive imbalance that was effectively ‘sold’ at the real-time ex post price in the CAISO real-time imbalance market.”<sup>77</sup> In the submitted briefs, the transcript, and Commission orders, false load scheduling as defined above has been referred to in a number of different ways, including overscheduling load, load deviation, and scheduling to hypothetical load. This violation is alleged to have been committed with more frequency than any other violation type.<sup>78</sup> To standardize the terminology, this Initial Decision will consistently use the term false load scheduling and overscheduling interchangeably.

39. Any participant in the organized auction market that scheduled transmission on the grid was known as a Scheduling Coordinator.<sup>79</sup> Under California’s energy regulatory design, the CAISO operated the transmission grid and required Scheduling Coordinators to submit balanced transmission schedules. The submitted balanced schedules consisted of a statement of the aggregate demand that the Scheduling Coordinator forecasted that it was responsible to serve in a particular hour and the corresponding source of the energy supply that the Scheduling Coordinator would deliver.<sup>80</sup> After the delivery of energy had taken place, the Scheduling Coordinator subsequently submitted meter readings to the CAISO that detailed the actual amount of energy that was transferred.<sup>81</sup> The CAISO then assessed an “uninstructed deviation” credit or charge to the Scheduling Coordinator based on the difference between the scheduled demand and the metered actual demand.<sup>82</sup> When scheduled demand exceeded the actual demand, the Scheduling Coordinator would

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<sup>77</sup> Ex. CAX-001 at 48 (revised).

<sup>78</sup> Tr. at 4436:19-22.

<sup>79</sup> Ex. CAX-143 at 24 (revised).

<sup>80</sup> Tr. at 3082:8-3083:18.

<sup>81</sup> Ex. CAX-100 at 433 (CAISO Tariff § 10.6.3); *see also* Tr. at 3245:16-3246:23.

<sup>82</sup> Tr. at 3291:8-3292:1.

receive a credit in accord with the real time market clearing price for the excess energy that it had supplied.<sup>83</sup>

40. The Respondents argue that false load scheduling violations constitute legitimate arbitrage that the Commission allows. While the Commission has said that legitimate arbitrage is permissible, the Commission gave no license that arbitrage may be accomplished by violating the tariffs and rules. Respondents are not precluded to pursue legitimate arbitrage to attain the maximum price for their energy supplies, such as positioning their supplies to be sold at the higher prices that persisted in the real time market.<sup>84</sup> However, such objectives cannot be pursued by violating tariff provisions.

41. The chief tariff provision that was violated by the conduct characterized as false load scheduling is CAISO Tariff section 2.2.7.2:

**2.2.7.2 Submitting Balanced Schedules.** A Scheduling Coordinator shall submit to the [CA]ISO only Balanced Schedules in the Day-Ahead Market and the Hour-Ahead Market. A Schedule shall be treated as a Balanced Schedule when aggregate Generation, Inter-Scheduling Coordinator Energy Trades (whether purchases or sales), and imports or exports to or from external Control Areas adjusted for Transmission Losses as appropriate, *equals aggregate forecast Demand with respect to all entities for which the Scheduling Coordinator schedules* in each Zone.<sup>85</sup>

42. The plain reading of this tariff provision imposes an obligation on Scheduling Coordinators to submit schedules that are based on the actual forecasted demand for the entities that they are obligated to serve.<sup>86</sup> This Initial Decision finds that this interpretation of this tariff provision is reasonable. The submitted schedules, for which the demand portion of the schedule was inflated and not based on a legitimate forecast of

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<sup>83</sup> Ex. CAX-100 at 440 (CAISO Tariff § 11.2.4.1).

<sup>84</sup> Ex. CAX-001 at 42 (revised); Tr. at 5715:8-5716:7; Tr. at 7052:8-7053:2; Tr. at 8439:11-20.

<sup>85</sup> Ex. CAX-100 at 28 (CAISO Tariff § 2.2.7.2) (emphasis added).

<sup>86</sup> See Ex. CAX-167 at 30-31 (revised Mar. 28, 2012); see also Tr. at 4437:1-11.



demand, as is the case with false load scheduling behavior, constitute a violation of this tariff provision.

43. False load scheduling violated additional tariff provisions. The CAISO Tariff section 2.2.11.1 requires each submitted schedule to include an identified “take-out point” and the quantity of energy set for delivery at this location.<sup>87</sup> Submitting a false aggregate quantity of demand would likewise constitute a violation of this tariff provision. The MMIP’s provisions that address anomalous market behavior, specifically MMIP section 2.1.1.3 that covers “unusual trades or transactions” and MMIP section 2.1.1.5 that covers “unusual activity or circumstances relating to imports from or exports to other markets or exchanges,” would also be implicated by false load scheduling.<sup>88</sup> The collective import of the series of cited tariff provisions can be distilled to a simple rule □ the submission of false information is a violation. False load scheduling qualifies as such, and therefore is found to be a violation.

44. The Commission previously addressed the practice of false load scheduling in the Gaming Order.<sup>89</sup> The Commission’s pronouncements in that order and its content serve as the basis for many of the of the Respondents’ arguments on false load scheduling, especially that overscheduling claims (false load) had already been resolved by the Commission, and that the Commission determined not to impose refunds because of the Complainants’ underscheduling. The Rehearing Order addresses directly the role that the Gaming Order should play in this proceeding, and directs that while it is relevant and may guide the Presiding Judge in reaching his determinations, it should not be construed as dispositive.<sup>90</sup> The Commission’s determination not to impose refunds was the

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<sup>87</sup> Ex. CAX-100 at 36 (CAISO Tariff § 2.2.11.1).

<sup>88</sup> *Id.* at 1031-32 (CAISO MMIP §§ 2.1.1.3, 2.1.1.5).

<sup>89</sup> Gaming Order, 103 FERC ¶ 61,345 at PP 59-60.

<sup>90</sup> The Commission stated:

The trading practices that were addressed by the Commission in the Show Cause Proceedings may also be examined in the instant proceeding. Those proceedings were initiated by the Commission pursuant to its investigatory and prosecutorial authority, and the resulting settlements were with Commission Trial Staff, not with the California Parties.

Rehearing Order, 135 FERC ¶ 61,183 at P 16; *see also CPUC Decision*, 462 F.3d at 1050-51.

resolution that the Commission chose to settle its Gaming Order proceeding. However, as the Commission recognized in the Rehearing Order, the complaint that the Ninth Circuit authorized and remanded to be addressed in this proceeding, is an effort to recoup the monetary damages that the Respondents had caused the Complainants. Therefore, the Commission's resolution in the Gaming Order is not binding in this complaint proceeding, as the Commission's prior determinations were carried out under the separate and distinct auspices of its prosecutorial and enforcement agenda and were made without the benefit of a record hearing as ordered here.<sup>91</sup>

45. Turning to the substance of the Gaming Order, the Commission affirmatively found that false load scheduling violated the applicable tariffs.<sup>92</sup> Despite this finding of a violation, the Commission did not order disgorgement of the profits of market participants that had engaged in this conduct, essentially making a discretionary enforcement determination not to penalize the violation due to the "countervailing circumstances" present, primarily the "utilities' practice of Underscheduling Load."<sup>93</sup>

46. The Respondents seized on the Gaming Order's determination that the Complainants underscheduled load, and anchored a host of related arguments on this statement. Their asserted arguments include that false load scheduling is therefore not a violation and that false load scheduling was widespread and sanctioned by the CAISO.<sup>94</sup> Similarly, Staff's contentions are permeated by equitable arguments that the

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<sup>91</sup> *CPUC Decision*, 462 F.3d at 1050-51.

<sup>92</sup> Gaming Order, 103 FERC ¶ 61,345 at P 60 ("Although the submission of such false schedules is a violation of the MMIP, there were countervailing circumstances that existed in the California market at the time that caused the market participants to engage in Overscheduling Load."). Staff's brief concurs in this assessment, stating that the "Commission has thus previously found both that Underscheduled Load and Overscheduled Load were technical violations of applicable tariff provisions." Staff Initial Br. at 14.

<sup>93</sup> In the Gaming Order, unlike the proceeding at hand, the Commission itself was playing *both* the role of assessing whether violations were committed and then subsequently the penalty to be imposed for any found violations. Gaming Order, 103 FERC ¶ 61,345 at P 60.

<sup>94</sup> *See, e.g.*, Respondent Common Issues Initial Br. at 126, 158 (stating that underscheduling and overscheduling "were widely known and accepted" and "did not violate the balanced schedule requirements of § 2.2.7.2 of the CAISO Tariff").

Complainants have unclean hands.<sup>95</sup> Here, Staff focuses on the question of whether “relief was warranted” for Complainants’ given the circumstances of their underscheduling.<sup>96</sup>

47. This series of arguments as raised by the Respondents and Staff overlooks the mandate that the Commission imposed on this proceeding, namely to determine whether or not violations were committed by the Respondents during the Summer Period.<sup>97</sup> As stated earlier, the Commission found that overscheduling is a tariff violation and the evidence presented in this proceeding comports with that finding.

48. The Respondents also argue that they may be excused for overscheduling because the CAISO mislead them to commit this violation and encouraged their violative practices.<sup>98</sup> The Respondents’ reliance on the guidance of a quasi-governmental entity overseen by the Commission cannot insulate them from the determination that they committed violations. However, in future proceedings in this matter the Commission may be persuaded to review this argument with respect to the amount of refunds that should be imposed. As one agency noted, following bad advice from one of its officials does not relieve a party of responsibility.<sup>99</sup> Therefore, the Respondents can argue that they were misled by CAISO authorities, but this argument, if availing at all, does not excuse the Respondents from being reported as violators. In the subsequent stages of this proceeding, the Commission may consider these arguments when assessing the amount of refunds. However, given the evidence as presented here, this Initial Decision finds that

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<sup>95</sup> Staff Initial Br. at 13.

<sup>96</sup> *Id.* at 14.

<sup>97</sup> *See* Rehearing Order, 135 FERC ¶ 61,183 at P 31.

<sup>98</sup> *See, e.g.,* Respondent Common Issues Initial Br. at 157 (“As with overscheduling, the CAISO was aware of the IOUs’ underscheduling strategy and similarly accepted the practice.”); Ex. POW-249.

<sup>99</sup> *See, e.g., Sec’y of Labor, Mine Safety and Health Admin. v. U.S. Steel Mining Co., Inc.*, 6 FMSHRC 2305, 2310 (1984) (“[T]he Commission held that although an incorrect interpretation of a regulatory requirement by an MSHA official does not have the force and effect of law and will not serve to negate liability for violative conduct, detrimental reliance on that interpretation is properly considered in mitigation of penalty.”).

the CAISO did not mislead the Respondents or give permission to submit false load schedules or overschedule load.

49. The above referenced argument that the CAISO approved of and encouraged overscheduling arose often in the hearing.<sup>100</sup> The Respondents pointed to Mr. Terry Winter, who formerly served as CEO of the CAISO, as having had conversations with one Scheduling Coordinator during which it was implied that the CAISO considered overscheduling as proper.<sup>101</sup> However, in February 19, 2003, Mr. Winter gave testimony in a FERC investigation in which he derided the practice:

When people over-schedule, I then am put in the position of trying to identify do they know something I did not know about the load? In other words, I can say it's 40,000, but let's say I had a qualifying facility that was generating 400 megawatts of load, and they're supposed to but they don't always tell us when they're going to take their units off, so now all of a sudden I've got a generator □ or I've got a scheduling coordinator who I'm thinking should only buy 200 megawatts, but because, in fact, he's going to have this generator off he's going to buy 600, since he has 400 megawatts and generator and load that is there because the unit is off, so he submits 600 generation to meet that load. Then what you're asking me to do on over-scheduling is look at every possible combination of the people over-scheduling and say is this good or bad, and my answer to that is it's bad, tell me to the best of your knowledge what it is. Then I can schedule congestion, I can schedule units, and I'm dealing with real numbers rather than inflated numbers. Now, when you finally get to the very end and you say, "I'm about to run out of power and I have generation here," does that help me? Yes, it does, but in the meantime I may have over-purchased.

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<sup>100</sup> See Ex. CSG-1 at 202 (revised Apr. 3, 2012); Ex. S-6 at 46; Ex. HAF-1 at 4-5; Ex. POW-233 at 105 n.81, 107, 138 n.132, 142.

<sup>101</sup> To the extent that this lone Scheduling Coordinator had such conversations with Mr. Winter is not given significant weight in this decision. Mr. Winter had no authority to tell anyone to violate the tariffs.

It can create all kinds of congestion, stability problems if I don't know exactly what the load and the generation is.<sup>102</sup>

These comments by Mr. Winter reveal the harm that overscheduling caused, in which the false information that was provided to the CAISO impeded the management of generation and load on its system and compromised its ability to assure reliability.<sup>103</sup> Additionally, Dr. Hildebrandt, the Director of CAISO's Department of Market Monitoring, testified that the submission of false load schedules was "specifically designed to be hidden from the scrutiny of system operators and market monitors" and carried out in a "manner that certainly the market monitors were not able to view or monitor."<sup>104</sup>

50. Based on this evidence, false load scheduling was not condoned but threatened reliability and was harmful to the market. It consisted of the input of false information to the CAISO, which thereby compromised CAISO's ability to ensure reliability. Additionally, energy that was purchased from the CalPX, so that it could be falsely scheduled, served to remove supply from the CalPX and drive those prices upward.<sup>105</sup>

51. One final point is important to note with respect to the relationship between the Gaming Order and this proceeding. The Gaming Order determined to relieve the Respondents of a refund obligation because it found that they overscheduled to make up for the underscheduling of the Complainants. Assuming for the sake of argument that the Respondents violated the tariffs by overscheduling due to the Complainants' underscheduling, the Gaming Order suggests that any relief from an order to provide a refund is only availing if the Respondents can show that each overschedule in this proceeding was related to and "a direct response to" a corresponding underschedule.<sup>106</sup> However, the Respondents did not present evidence at the hearing to show that each transaction of overscheduling was in response to an identifiable, corresponding underschedule by utilities.

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<sup>102</sup> Ex. CAX-192 at 62.

<sup>103</sup> Tr. at 3095:17-3096:14.

<sup>104</sup> Tr. at 3428:3-4, 15-16.

<sup>105</sup> Tr. at 3096:15-23.

<sup>106</sup> Gaming Order, 103 FERC ¶ 61,345 at P 60.

52. This lack of proof stands in stark contrast to the methodically assembled, hour-by-hour data screens of the Complainants that depict overscheduling and firmly established their *prima facie* case on the issue of overscheduling. The Respondents' failure to present sufficient evidence that matched and correlated underscheduling with overscheduling means that they have failed to avail themselves of the equitable relief that the Gaming Order suggested.

### **B. Evidence of Respondents' Engaging in False Load Scheduling Violations**

53. The screens, evidence and methodology presented by the Complainants appropriately capture those Respondents that committed false load scheduling violations. The starting point entailed establishing all hours in which the Respondents received payments for positive uninstructed deviations.<sup>107</sup> Occurrences of true false load infractions were then segregated from any instances of normal fluctuations in generation and demand through the imposition of a conservatively established screen<sup>108</sup> that excused any imbalances that were ten percent or less.<sup>109</sup> This methodology was carried out by reviewing extensive transactional data, business records, tariff provisions, trader tapes, and associated studies.<sup>110</sup>

54. Pursuant to the Complainants' methodology, as adopted by this Initial Decision, the Respondents are found to have committed a total of 15,286 false load scheduling violations.<sup>111</sup> The Respondents and the findings as to their respective violations are listed in the paragraphs below.

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<sup>107</sup> Ex. CAX-167 at 24 (revised Mar. 28, 2012).

<sup>108</sup> Ex. CAX-001 at 93 (revised); Tr. at 4445:23-4446:2.

<sup>109</sup> Ex. CAX-167 at 24 (revised Mar. 28, 2012); Tr. at 3117:18-3121:17.

<sup>110</sup> See Ex. CAX-001 at 92-99 (revised); Ex. CAX-167 at 24 (revised Mar. 28, 2012); Ex. CAX-216; Ex. CAX-385; Tr. at 3062:4-16; Tr. at 3078:17-3079:17; Tr. at 3115:1-17; Tr. at 3134:15-3135:4.

<sup>111</sup> Ex. CAX-001 at 95 (revised).

55. Powerex is found to have committed 2,708 false load scheduling violations involving 661,157 MWh.<sup>112</sup>

56. Illinova is found to have committed 3,243 false load scheduling violations involving 12,935 MWh.<sup>113</sup>

57. The number of violations by APX is found to be 2,960 false load scheduling violations involving 456,471 MWh.<sup>114</sup>

58. Shell Energy is found to have committed 2,598 false load scheduling violations involving 167,545 MWh.<sup>115</sup>

59. California Polar is found to have committed 2,242 false load scheduling violations involving 113,488 MWh.<sup>116</sup>

60. Hafslund is found to have committed 1,535 false load scheduling violations involving 320,699 MWh.<sup>117</sup>

61. The MPS is found to have committed false load scheduling violations.<sup>118</sup>

**C. Evidence of False Load Scheduling Affecting the Market Clearing Price**

62. The Complainants determined that 10,890 of the identified false load scheduling violations by the Respondents raised the price in one of the markets in which they had

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<sup>112</sup> *Id.* at 95, 97, 109-13, 164-66.

<sup>113</sup> *Id.* at 95.

<sup>114</sup> *Id.* at 95, 120-21.

<sup>115</sup> *Id.* at 95, 171-81.

<sup>116</sup> *Id.* at 95.

<sup>117</sup> *Id.* at 95, 97-98.

<sup>118</sup> Ex. CAX-001 at 193-95 (revised); Ex. CAX-099; Ex. CAX-167 at 25 (revised Mar. 28, 2012).

occurred, specifically the CalPX day ahead energy market.<sup>119</sup> This Initial Decision finds the Complainants' price effects methodology to be sound and adopts the methodology.

63. In accord with the Complainants' methodology, this Initial Decision finds that APX, MPS, California Polar, Shell Energy, Hafslund, Illinova, and Powerex committed false load scheduling violations that served to increase prices.<sup>120</sup> The Complainants have met their prima facie burden on this claim.

## **V. Selling Ancillary Services Without Market-Based Rate Authority**

64. The Respondents made sales during the Summer Period into three CAISO single price auction markets for ancillary services: spinning reserves, non-spinning reserves, and replacement reserves. The Complainants have alleged that some Respondents, namely Avista Energy, Koch, Powerex, and TransAlta, made sales into the ancillary services markets, at market rates, but without market-based rate authority.<sup>121</sup> Not having market-based rate authority for ancillary services, the public utilities could only sell their energy and capacity at cost-based rates. The Commission granted market-based rate authority generally to all sellers of ancillary services in the CAISO market. However, in order to implement this grant of authority, the Commission required jurisdictional suppliers that had not applied for market-based rate authority for ancillary services transactions to file amendments to the rate schedules under which they sold energy at market-based rates, requiring them to specifically add ancillary services. To the extent that any doubt prevailed as to whether replacement reserves were to be considered ancillary services, the Commission also directed a similar amendment to cover these services.<sup>122</sup>

65. A fair reading of the Commission's decision in *AES Redondo Beach, L.L.C.*<sup>123</sup> shows that the Commission mandated that all selling entities of ancillary services must amend their tariffs to include these services. The Respondents argue that the grant of

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<sup>119</sup> Ex. CAX-315; Tr. at 2433:1-7.

<sup>120</sup> Ex. CAX-315.

<sup>121</sup> Ex. CAX-110 at 64 (revised Mar. 26, 2012).

<sup>122</sup> *AES Redondo Beach, L.L.C.*, 85 FERC ¶ 61,123, at 61,461, 61,464 (1998) (Ancillary Services Rehearing Order), *order on reh'g*, 87 FERC ¶ 61,208 (1999), *order on reh'g*, 88 FERC ¶ 61,096 (1999).

<sup>123</sup> *Id.*



market-based rate authority was automatically active and valid without any further action on their part, such as amending tariffs. The Complainants have shown on this record that these Respondents did not amend their tariffs to comply with the Commission's directive.<sup>124</sup> In addition, Dr. Berry has provided evidence of the violations during each hour of Summer Period for capacity and energy bids into ancillary services markets.<sup>125</sup> Dr. Fox-Penner has also presented evidence of the price effects for each hour of these violations.<sup>126</sup> The Complainants have presented a *prima facie* case on these claims.

## **VI. The Burden of Proof, the Screen Methodology, and the Rebuttable Presumption**

66. All of the parties in this matter agree that the Complainants must prove their case as laid out by the Commission by a preponderance of the evidence. The Commission's orders expressly vest the Presiding Judge with discretion about how to make the violation determinations, stating "we leave it to the Presiding Judge to make an initial determination of whether the above identified market practices violated MMIP or other tariff provisions."<sup>127</sup> As noted earlier, the Commission has outlined the construct of a *prima facie* case for the Summer Period, which requires the Presiding Judge to determine: "(1) which market practices and behaviors constitute a violation of the then-current CAISO, CalPX, and individual seller's tariffs and Commission orders; (2) whether any of the sellers named as respondents in this proceeding engaged in those tariff violations; and (3) whether any such tariff violations affected the market clearing price."<sup>128</sup> A *prima facie* case for the Complainants therefore is to present sufficient evidence to meet each of the three elements as laid out by the Commission. The Complainants have accomplished this requirement for a number of the alleged violations by providing screens that showed patterns of conduct that matched the established definitions of various violations, and in addition provided evidence of the effect of the violations on the market clearing price.

67. The screens presented evidence of the violations for each hour and the price effects for each hour. Tariff violations with isolated, standalone price-increasing effects

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<sup>124</sup> Ex. CAX-110 at 70 tbl.10 (revised Mar. 26, 2012).

<sup>125</sup> See Ex. CAX-285; Ex. CAX-286; Ex. CAX-287.

<sup>126</sup> Ex. CAX-321.

<sup>127</sup> Rehearing Order, 135 FERC ¶ 61,183 at P 28.

<sup>128</sup> *Id.* P 31.

occurred in all but 46 of the 3,696 hours of Summer Period.<sup>129</sup> However, as will be discussed in greater detail later, the Respondents did not move forward with evidence to rebut the hour by hour demonstrations of violations. They provided generalized arguments that all of their transactions were legitimate business practices, that their arbitrage transactions were permitted by the Commission and constituted good market practices, and that the CAISO in particular condoned and permitted certain violations. They further argued that prices during the Crisis Period were a reflection of supply shortages, increased demand, natural economic conditions, and in the case of hydro generators, a shortage of water storage and the need to achieve opportunity costs.

68. However, during the presentation of their evidence, no Respondent addressed each or any of the individual 3,696 hours to show that any particular transaction that was identified in any particular hour was not a false load scheduling, false export, or other violation as the screen had indicated. By contrast, in its orders the Commission imposed a high burden on the Complainants, requiring that they make a factual demonstration of each violation, hour-by-hour, and not generally. The Commission reiterated that the Complainants must be very specific about delineating which violations had occurred and must demonstrate the nexus between the market clearing price in a specific trading hour and the unlawful conduct committed by a specific seller. The Complainants were required to specify which tariff provision or portion of the tariff provision was violated. General allegations would not suffice.<sup>130</sup>

69. To comply with this mandate, the Complainants' experts developed screens to show the individualized violations, hour-by-hour, and the price effects for each hour. These screens established a rebuttable presumption that violations occurred in the identified hours. Commission precedent has required utilities to rebut similar screens. For example, in the Gaming Order the Commission elaborated on the steps that entities, which had failed the screens, must take to show that their activities were legitimate business practices.<sup>131</sup> While the Gaming Order was speaking to the violation of false import, the rebuttal obligations that the Commission imposed would apply with equal weight to all the violations in the Summer Period that were addressed by the screens in this case. Therefore, the imposition of such a rebuttable obligation on the basis of screens that are designed to demonstrate that something is amiss in the electric markets is

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<sup>129</sup> See Ex. CAX-143 at 6 (revised).

<sup>130</sup> Rehearing Order, 135 FERC ¶ 61,183 at PP 28, 38.

<sup>131</sup> Gaming Order, 103 FERC ¶ 61,345 at P 67.

not new to the Commission's jurisprudence or the industry. The Commission often imposes such a burden on entities to move forward with evidence to show legitimate activity when they fail certain presumptive screens.

70. A fair inference here is that the Commission has no quarrel with Rule 301 of the Federal Rules of Evidence: "In a civil case, unless a federal statute or these rules provide otherwise, the party against whom a presumption is directed has the burden of producing evidence to rebut the presumption. But this rule does not shift the burden of persuasion, which remains on the party who had it originally."<sup>132</sup>

71. At the hearing and in their pleadings, the Respondents presented a fair argument that the screens may contain transactions that were legitimate business practices, and therefore the methodology of the screens must fail because one cannot review the screens and discern which transactions were legitimate without more proof from Complainants. The Commission in the Gaming Order recognized that the screens that were used by the CAISO and Dr. Fox-Penner to show gaming practices may also include legitimate business transactions. Therefore, the Commission offered the entities the opportunity to submit rebuttal evidence to demonstrate that any or all of the transactions that were identified in the CAISO Report or Dr. Fox-Penner's studies were not gaming practices. The Commission explained:

For example, with respect to transactions identified as False Imports, evidence that may demonstrate that the transactions were legitimate transactions and not part of a False Import practice might include establishing that: (a) the "imported" power was actually imported from outside the state of California and not a fictitious import, i.e., not an export and import that constitutes a False Import, as described above; (b) the transaction was designed to work around a transmission constraint (such as on Path 15) which limited the movement of power between two points within the ISO control area by using an uncongested transmission path (such as the Pacific DC intertie) to move the power to a point outside the ISO control area and back to its intended destination; (c) the export and import were actually two independent and unrelated obligations such as a pre-existing long-term bilateral contractual export obligation followed by a real time

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<sup>132</sup> Fed. R. Evid. 301.

import from the same party in an unrelated transaction; or (d) the market participant was importing power on behalf of the ISO or California Department of Water Resources (California DWR), because suppliers were unwilling to assume the credit risk of dealing directly with the ISO or California DWR.<sup>133</sup>

72. Here, the Commission clearly contemplated that the entities must present countervailing evidence for each transaction to rebut the presumptions of liability as established by the screens. In another matter, the Commission required entities to provide rebuttal evidence in the face of screens that showed likely market power.<sup>134</sup> The Commission stated:

Failure to pass either of the indicative screens (which, as noted above, creates a rebuttable presumption of market power) will constitute a *prima facie* showing that the rates charged by the applicant pursuant to its market-based rate authority may have become unjust and unreasonable and that continuation of the applicant's market-based rate authority may no longer be just and reasonable.<sup>135</sup>

Again, the entity here was required to come forward to rebut the presumption that it had market power as demonstrated by a screen.<sup>136</sup> This framework of a *prima facie* case and a corresponding rebuttable presumption is recurrent in the decisions issued by the Commission and its administrative law judges.<sup>137</sup>

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<sup>133</sup> Gaming Order, 103 FERC ¶ 61,345 at P 67.

<sup>134</sup> See *AEP Power Mktg, Inc.*, 107 FERC ¶ 61,018 at P 209 (2004).

<sup>135</sup> *Id.* (emphasis added).

<sup>136</sup> *Id.*; see also *S. Co. Energy Mktg., Inc.*, 109 FERC ¶ 61,275 at P 34 (2004) (“As outlined in the April 14 Order, Southern Companies' failure of the wholesale market share screen provides the basis for the Commission to institute the instant section 206 proceeding, which is limited to Southern's control area, to determine whether Southern Companies may continue to charge market-based rates in that market, and establishes a rebuttable presumption of market power.”).

<sup>137</sup> See, e.g., *Tex. Gas Serv. Co. v. El Paso Natural Gas Co.*, 136 FERC ¶ 63,010 at P 327 (2011) (J. Silverstein) (“The party with the burden of proof also bears the burden  
(continued)

73. The Respondents did not meet their burden to go forward once they were confronted with a *prima facie* case. Their generalized arguments to challenge the evidence, or at best to criticize the methodology of the screens, was not sufficient to negate the *prima facie* case that the Complainants presented in the screens. Most prevalent in their testimonies is their attack on the Mitigated Market Clearing Price (MMCP) calculations for failure to factor in opportunity costs, especially for hydro units. Some witnesses spoke on other elements that should be factored into the MMCP. However, none provided any recalculations of the MMCP nor applied these recalculations as their preferred methodology to show that, if their calculations were used, then a violation shown in hour “X” would not be anomalous. No such demonstration was performed with respect to any hours of the Summer Period.

74. Such an effort from the Respondents to present their hour-by-hour rebuttal would have provided the Complainants an opportunity to vet those calculations and perhaps to have encouraged the Complainants to dismiss some additional allegations as they had done early in the proceedings. But, instead, the Respondents presented general criticisms of the methodology. Only an hour-by-hour showing using their own methodology, had they developed one, would be sufficient to rebut the Complainants’ hour-by-hour showing of violations.

75. One general argument that the Respondents made was with respect to withholding. They argued, especially the hydro generators, that water storage was low during the summer when the CAISO was desperate for energy. To accommodate the CAISO’s needs the Respondents would bid the energy at a very high price so that it would not be dispatched □ unless absolutely necessary. While the Respondents argued that the CAISO agreed and encouraged this approach they pointed to no depictions in the data to show that any transaction fit this approach.

76. A fair argument that may be raised by the Respondents is that the burden to challenge each of the thousands of hours presented by the screens would be overwhelming and too onerous of an obligation for a rebuttal case. While the validity of this point can be debated, the Respondents had other defenses available to them that are

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of production, or the need to provide sufficient evidence to establish a *prima facie* case. Once it meets that burden, however, the burden of going forward shifts to the opposing party.”) (internal citations omitted); *Nantahala Power & Light Co.*, 19 FERC ¶ 61,152, at 61,276 (1982) (“[T]he burden of proof in a § 206 complaint proceeding is on the complainant. The burden consists of coming forward with a *prima facie* case and once this initial burden is met, the burden shifts to the respondent.”).

well known in Commission jurisprudence, such as the statistical sampling defense. The Commission has permitted statistical sampling for investigative or rate projection purposes.<sup>138</sup> Nothing in Commission jurisprudence prevents the offer of such a defense to rebut a screen that has demonstrated a tariff violation. For example, if the Respondents had shown that a significant statistical sample of 5 percent or 10 percent of the individual violations in the screens were in fact legitimate transactions for which they had facts to support, they would have been able to attempt an argument, if not a convincing one, that the error rate of the screens was too high and that therefore the screens should not be credited. However, as stated before, none of the specific transactions in the screens were challenged so the validity of such rebuttal evidence could not be tested.

77. Therefore the evidence that these violations were transacted by Respondents stands and remains against the Respondents as indicated in the screens for which a *prima facie* case was made.

## **VII. Market Manipulation Allegations During the Summer Period That Were Not Proved By Complainants**

78. As previously stated, the Commission mandated the Presiding Judge to determine “(1) which market practices and behaviors constitute a violation of the then-current CAISO, CalPX, and individual seller’s tariffs and Commission orders; (2) whether any of the sellers named as respondents in this proceeding engaged in those tariff violations; and (3) whether any such tariff violations affected the market clearing price.”<sup>139</sup> During the proceeding, some issues were dropped<sup>140</sup> and some issues did not garner the requisite evidence to form a *prima facie* case. This section of the Initial Decision will touch only briefly on those matters that were put forward by the Complainants, but failed to meet the *prima facie* case requirements as mandated by the Commission.

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<sup>138</sup> In *Iowa Southern Utilities Co.*, 16 FERC ¶ 62,149, at 63284 (1981), the Commission stated that the cost of sample metering for a small utility is substantially the same as for a large utility and statistical sampling to plus or minus 10 percent at the 90 percent confidence level requires about the same number of meters regardless of the number of customers in a rate class.

<sup>139</sup> Rehearing Order, 135 FERC ¶ 61,183 at P 31.

<sup>140</sup> For example, Complainants retracted their allegations that Respondents committed Withdrawn Schedules violations. California Parties Initial Br. at 172.

79. **Type I Anomalous Bids:** As stated above, the Complainants failed to make out a *prima facie* case for this bid type. While they presented evidence that these bids were violations, they did not complete their proof for a *prima facie* case by demonstrating the price effects that these violations had on the market clearing price. However, Powerex, APX, BPA, Avista Energy, Shell Energy, and WAPA are found to have committed these violations during the Summer Period as shown in Tables 1 and 2 of exhibit CAX-110.<sup>141</sup>

80. **Phantom Ancillary Services:** Under this violation, market participants bid ancillary services (spinning reserves, non-spinning reserves, or replacement reserves), for which they did not have the resources to supply.<sup>142</sup> If the bid was accepted, then the seller had to determine how to remedy its “short” position.<sup>143</sup> For example, suppliers often sold ancillary services into the day ahead auctions that they could not provide if called upon. However, the CAISO also ran an hour ahead ancillary services auction, allowing the suppliers to simply “cover” their short position by purchasing identical ancillary services in the hour ahead market.<sup>144</sup> This strategy often proved profitable due to the persistent price differential between the two markets. While buying back the sale did not constitute a violation, the sale of services that the entity was not in a position to provide did violate applicable tariff provisions. These transactions violated the MMIP provisions on unusual trades and gaming, and the general requirement to comply with CAISO protocols.<sup>145</sup> These transactions also violated a whole range of operating and bidding requirement tariff provisions and the provisions of the Ancillary Services Protocol.<sup>146</sup> The only Respondent that is alleged to have committed this violation is Shell Energy.<sup>147</sup> While the Complainants presented evidence that these bids were violations,

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<sup>141</sup> Ex. CAX-110 at 27 (revised Mar. 26, 2012); Ex. CAX-271.

<sup>142</sup> Ex. CAX-001 at 70 (revised).

<sup>143</sup> *Id.* at 70.

<sup>144</sup> *Id.* at 71.

<sup>145</sup> *Id.* at 73-74.

<sup>146</sup> *Id.*

<sup>147</sup> Ex. CAX-220. The Complainants have withdrawn the allegations previously made against Powerex and Avista Energy as to this violation. California Parties’ Notice of Withdrawal of Allegations Concerning Certain Transactions (April 10, 2012).

they did not complete their proof by demonstrating the price effects that these violations had on the market clearing price as the Commission had required for a *prima facie* case.

81. **Intentional Running of Uninstructed Generation:** This violation involved a market participant, who controlled generation resources and refused to adhere to the rules by generating more energy than the amount for which it was scheduled to produce or that the CAISO had dispatched.<sup>148</sup> Only one Respondent, Sunlaw, is found to have committed this violation. During the month of May 2000, each of its units' "maximum rating of about 33 MW was oftentimes exploited when Sunlaw ran uninstructed and ultimately received the uninstructed energy revenues from the [CA]ISO."<sup>149</sup> The Complainants devised a conservative screen that only identified a violation if a unit ran uninstructed for more than 10 percent of its capacity and found that "Sunlaw ran uninstructed in 422 of the 744 hours in May 2000."<sup>150</sup> A graphic representation demonstrating Sunlaw's over generation is depicted in Figure V-8 as contained in exhibit CAX-001.<sup>151</sup> While the Complainants presented evidence that these violations had occurred, they did not complete their proof by demonstrating the price effects that these violations had on the market clearing price as the Commission required for a *prima facie* case.

82. **Fraudulent Collection of Congestion Revenues:** The umbrella strategy of fraudulently collecting congestion revenues can be delineated into a number of different transaction categories as further discussed below. The purpose of these strategies was to collect congestion fees. These transactions are violations of the provisions of the MMIP that target gaming activities that take advantage of transmission constraints during periods of congestion. These strategies often involved providing false or misleading information to carry out violations such as False Counterflow. Such strategies also violated the relevant CAISO scheduling provisions and the requirements of the Schedules and Bids Protocol, along with violating each supplier's market-based rate authorization.<sup>152</sup>

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<sup>148</sup> Ex. CAX-001 at 41-42 (revised).

<sup>149</sup> *Id.* at 122.

<sup>150</sup> *Id.* at 123.

<sup>151</sup> *See id.* at 122 fig.V-8.

<sup>152</sup> Ex. CAX-001 at 62-68 (revised).



83. While the Complainants presented evidence that these transactions were violations that manipulated the congestion management process in order to receive congestion payments, they did not complete their proof by demonstrating the price effects that these violations had on the market clearing price as the Commission required for a *prima facie* case. Dr. Fox-Penner did not perform price effects analyses on these violations, finding them to be too difficult to model in the absence of a clearly defined market clearing price. However, he did assert that he had no doubt that these violations increased the overall costs of the Complainants' power supplies.<sup>153</sup> The evidence shows that Shell Energy and Powerex participated in some or all of these strategies.<sup>154</sup> Each transaction category is discussed briefly below.

84. **Circular Scheduling:** This violation “took advantage of power flow characteristics and the fact that the [CA]ISO could only ‘see’ the portions of a transmission path that were within its boundaries.”<sup>155</sup> The Commission previously has recognized this transaction as a violation and labeled this gaming strategy “Death Star.”<sup>156</sup> This strategy may be further described as follows:

For example, a supplier could schedule an import DA at Palo Verde (a southwest trading hub outside the ISO) into the Southern part of the ISO that flowed through the ISO across Path 15 and out of the ISO as an export at the California Oregon Border (“COB”) in the North. If there were north-to-south congestion in the ISO on Path 15, the flow would collect congestion payments. However, if the supplier also scheduled a flow on transmission outside the ISO from COB back to Palo Verde, that would complete a loop. In such a loop there would be no actual flow on an AC power system since the schedules into and out of every point in the loop netted to zero. The supplier would not provide any energy or real flow or congestion relief. They would simply file false schedules and provide no generation, but would nonetheless

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<sup>153</sup> See Ex. CAX-143 at 45 (revised).

<sup>154</sup> See Ex. CAX-219.

<sup>155</sup> Ex. CAX-001 at 62 (revised).

<sup>156</sup> Gaming Order, 103 FERC ¶ 61,345 at P 43.

collect congestion revenues for the counterflow the ISO saw scheduled across Path 15.<sup>157</sup>

85. **False Counterflow:** This strategy was accomplished by reducing the amount of false load scheduled in a congested region, while increasing the amount of false load scheduled in an uncongested region in order to derive congestion revenues.<sup>158</sup>

86. **Shifting False Load:** This violation is a form of False Counterflow, as described above, in which a market participant scheduled generation from a constrained zone to an unconstrained zone, with the scheduled generation traveling over the transmission line against the congestion.<sup>159</sup>

87. **Other Tariff-Violating Schemes:** The Complainants generally allege a host of “other” interrelated violations including false price reporting, attempts to arrange boycotts, and criminal acts involving manipulation.<sup>160</sup> The Complainants did not complete their *prima facie* case for these violations due to a failure to show price effects.

### **VIII. Discussion of Marginal Cost, Opportunity Cost, and the MMCP, and the Role of These Elements in the Summer Period Analysis**

88. The marginal cost of market participants lays the foundation for when and under what circumstances their bids and transactions may be found anomalous. Merely bidding above marginal cost is not a tariff violation. However, certain bidding patterns in relation to marginal cost are indicative of anomalous bidding as illustrated by the Type II and Type III bids that were addressed above. Dr. Berry structured marginal cost by considering a number of factors. As Dr. Berry notes, marginal cost depends upon characteristics that are related to the type of seller, such as importers that own generation versus sellers that are marketers and therefore do not own generation. Most sellers in her analyses were importers. However, a limited number of sales were made by certain in-state generation units. For these in-state generation units, she estimated the marginal cost

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<sup>157</sup> *Id.* at 62-63.

<sup>158</sup> Ex. CAX-001 at 66-67 (revised); Ex. CAX-167 at 155-56 (revised Mar. 28, 2012).

<sup>159</sup> Tr. at 4089-4091; Ex. CAX-001 at 66-68 (revised); Ex. CAX-167 at 156-57 (revised Mar. 28, 2012).

<sup>160</sup> See California Parties Initial Br. § III.G.

as the MMCP that was calculated by Dr. Yan who followed the Commission's methodology as adopted in other refund proceedings. The MMCP reflects the cost of the most expensive unit dispatched in the CAISO real time market, thus her cost estimate is conservative.<sup>161</sup>

89. An importer could be a generator or a marketer. Importers that were generators did not provide information about the costs or operation of their generating units to the CAISO. When these sellers submitted a bid into the CAISO real time market, they had to identify the intertie over which the energy would flow, but they were not required nor did they provide information about the physical source of the energy.

90. Marketers were resellers and owned no generation. In order to make a sale in the CAISO real time market, they bought energy on a forward basis and then bid it into the CAISO real time market. The CAISO real time market was the last market to operate before the actual delivery of energy in the Western Electricity Coordinating Council (WECC). If a marketer's bid was not chosen in the CAISO real time market, the marketer had limited alternatives. The marketer could simply take delivery of the energy, sell it to no one, or let it flow on the system where the energy was located. This action would create an energy imbalance on that system that ran the risk of being penalized by that system's balancing authority.<sup>162</sup> Alternatively, the marketer could sell the energy at a heavily discounted or "disposal" price to a generator that would benefit by backing down its physical generation.

91. In both cases, the importer's marginal cost is its opportunity cost. In the first case, the seller's opportunity cost is zero, or may even be negative, if the marketer had to pay a fine for the imbalance that it had created. In the second case, the seller's opportunity cost was the disposal price. The proxy for the disposal price was equal to the marginal cost of the most expensive gas fired generator that was dispatched in the CAISO real time market for each hour during the Summer Period □ the MMCP as calculated by Dr. Yan. This disposal price is a conservative estimate. To the extent that out-of-state generation owners had marginal costs that were less than the most expensive California unit, then the MMCP will overstate the disposal price and thus be a conservative measure.<sup>163</sup>

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<sup>161</sup> See Ex. CAX-110 at 50 (revised Mar. 26, 2012).

<sup>162</sup> *Id.* at 51.

<sup>163</sup> *Id.* at 53.

92. Generators including BPA and WAPA controlled hydro systems and traded their energy. Hydro systems required a slight variation in methodology to measure marginal cost. For energy sold from their hydro resources, the marginal cost is the opportunity cost equal to the cost of replacement energy. Given their hydro storage capability, BPA and WAPA were able to replace energy sold in the CAISO real time market during low price periods by purchasing energy at trading hubs such as Mid-C or Palo Verde. To reflect both hydro replacement costs and marketing costs, Dr. Berry used the higher of the off-peak Mid-C index price and the MMCP as the marginal cost for BPA, and the higher of off-peak Palo Verde index price, off-peak Four Corners index price, and MMCP for WAPA.

93. As the power marketer of BC Hydro, Powerex worked closely with BC Hydro to maximize the value of BC Hydro's system. This relationship involved selling BC Hydro's energy in the U.S. when prices were high and buying energy in the U.S. and sending it to Canada when prices were low. To optimize the best selling and buying circumstances, BC Hydro computed a threshold value called "Rbch." When prevailing market prices were above the Rbch, Powerex sold BC Hydro energy from Canada into the U.S. When prevailing market prices were below the Rbch, Powerex purchased energy in the U.S. for BC Hydro storage in Canada.<sup>164</sup> The figures for Powerex show that its Rbch average hourly amount is \$58.96.<sup>165</sup> The MMCP average hourly amount for the summer period is \$58.70724346 and the average 10 minute MMCP amount is \$62.014233.<sup>166</sup> The closeness of these figures would seem to support Dr. Berry's use of Rbch to determine the anomalous bids for Powerex.

94. These topics of opportunity cost and marginal cost deign some discussion only because the Respondents made repeated arguments that the MMCP as calculated by the Complainants did not include opportunity costs. They argued further that neither marketers nor generators, and especially hydro generators, would sell at marginal cost less they risked going out of business. This argument does not prevail, as it appears clear that the factors in the MMCP, as presented here, include elements of opportunity cost. In this sense, the MMCP as presented in this case benefits the Respondents by requiring a

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<sup>164</sup> *Id.* at 55.

<sup>165</sup> The Presiding Judge calculated this average from Ex. CAX-110 at 57 tbl.7 (revised Mar. 26, 2012).

<sup>166</sup> The Presiding Judge calculated this average from Ex. CAX-124 (revised).

higher threshold to demonstrate an anomalous transaction, a threshold higher than the Commission would have required.

95. The Commission has consistently held that in refund proceedings, opportunity cost is not a factor in the MMCP calculations, because energy that is offered in real time cannot be sold elsewhere:

We decline to allow the additional cost items proposed by parties. As discussed in our prior orders, our mitigation plan is intended to replicate the price that would be paid in a competitive market, in which sellers have the incentive to bid their marginal costs....Furthermore, *opportunity costs are not appropriate* because energy that is available in real time cannot be sold elsewhere. We note that, during the latter half of this year, spot market sales in all of the major western trading hubs (Palo Verde, Mid Columbia and California-Oregon Border) have consistently been below \$40/MWh, which is well below the current mitigated non-reserve deficiency MCP of approximately \$92/MWh. To the extent generators find that the Proxy Price will not compensate them for their marginal costs, they are permitted to file cost based rates for their entire portfolio in the WSCC.<sup>167</sup>

96. Drs. Berry and Yan included some measure of opportunity cost in the MMCP, although Dr. Berry agreed with the Commission that it was not a factor requiring inclusion in the MMCP since the CAISO real time market was the last market into which energy could be sold in the WECC, and therefore these sellers had given up their opportunity for other sales.<sup>168</sup> Although one of the Respondents' witnesses made an effort to refute that the real time market was the last opportunity for his client, in the end he could only say that the CAISO data shows that his client made many transactions, but was unable to relate that transactional data to any transactions in real time that were not dispatched by the CAISO and yet his client was able to find other opportunities for its non dispatched energy.

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<sup>167</sup> *San Diego Gas & Elec. Co. v. Sellers of Energy & Ancillary Servs.*, 97 FERC ¶ 61,275, at 62,212 (2001) (emphasis added).

<sup>168</sup> Ex. CAX-110 at 51 (revised Mar. 26, 2012).

97. Another argument of the Respondents is that the MMCP was not developed until well after the Crisis Period. For this reason, equity would require that the Commission not impose refunds since no one could know at the time of bidding in 2000-2001 that the bids were above the MMCP.<sup>169</sup> However, MMCP is merely a remedial methodology to bring prices back to the level of normal competitive markets, so bidding above the MMCP is not the issue. The issue is violating tariffs, and in any event, all generators and marketers should have known their marginal costs, which the MMCP represents. As the Commission observed, marginal cost is an appropriate benchmark to test the workings of a competitive market.

98. Based on the record and Commission holdings, the MMCP, as presented in this case, is a credible proxy of prices in a normal competitive market and was properly applied to the Summer Period as a factor to determine which transactions are anomalous and therefore are violations of the tariffs, rules, or Commission orders.

### **PART 3**

## **FINDINGS OF FACT AND CONCLUSIONS OF LAW FOR THE REFUND PERIOD**

### **I. Forward Transactions**

#### **A. Forward Transactions Defined**

99. Forward transactions are defined as transactions in the CAISO and CalPX markets “of greater than 24 hours.”<sup>170</sup> These transactions were previously excluded from the Commission’s prior proceedings because the Commission initially had construed the SDG&E’s Federal Power Act (FPA) section 206 complaint to only encompass spot market sales in the CAISO and CalPX markets, which were defined as “sales that are 24 hours or less and that were entered into the day of or day prior to delivery.”<sup>171</sup> In the CPUC Decision, the Ninth Circuit subsequently reversed this construction of SDG&E’s

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<sup>169</sup> See Respondent Common Issues Initial Br. at 180-81.

<sup>170</sup> *CPUC Decision*, 462 F.3d at 1055. The Remand Order inadvertently referred to “block forward market transactions” instead of “forward transactions,” however the Rehearing Order corrected the terminology accordingly. Rehearing Order, 135 FERC ¶ 61,183 at P 40.

<sup>171</sup> *CPUC Decision*, 462 F.3d at 1056; *San Diego Gas & Elec. Co.*, 95 FERC ¶ 61,418 at 62,545 n.3 (defining the terms “spot market” and “spot market sales”).

complaint, causing forward transactions, as defined above, to be set for hearing in this proceeding.<sup>172</sup>

100. In the submitted briefs, the transcript, and Commission orders, forward transactions as defined above have been referred to in a number of different ways, including multi-day sales and non-spot market transactions. To standardize the terminology, this Initial Decision will consistently use the term forward transactions.

## **B. The Relevant Law and the Commission's Directive**

101. Significant disagreement among the parties arose during the hearing in this matter regarding the precise instructions that the Commission had ordered for the resolution of the forward transactions. Under a section 206 complaint, the Complainants must first show that the rates are unjust and unreasonable and then propose the just and reasonable rate. However, these transactions were bilateral contracts<sup>173</sup> and not bids into the organized auction markets of the CAISO. The Respondents argue therefore, that before any modification of these contracts can occur, they must first be vetted under the *Mobile-Sierra* standard, which requires the additional finding that the contracts are against the public interest. The Complainants argue that the Commission has already made the determination that the contracts were unjust and unreasonable and that it merely directed the Presiding Judge to propose a refund methodology and to calculate refunds, without analysis as to whether the rates were unjust and unreasonable or subject to the *Mobile-Sierra* standard.

102. With respect to the forward transactions, the Remand Order states “[t]he ALJ [Presiding Judge] will then determine which of those transactions, if any, are subject to mitigation and calculate appropriate refunds.”<sup>174</sup> Subsequent to this order, Constellation sought clarification as to whether the Commission “prejudge[d] the issue of whether these [forward] transactions should automatically be subject to mitigation.”<sup>175</sup> In response, the Commission stated that the “instructions to the ALJ [Presiding Judge] to

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<sup>172</sup> *CPUC Decision*, 462 F.3d at 1055-59.

<sup>173</sup> The Complainants were not parties to these contracts. These contracts were between some Respondents and the CAISO and CalPX. However, any affected person or entity may file a Complainant under section 206.

<sup>174</sup> Remand Order, 129 FERC ¶ 61,147 at P 4.

<sup>175</sup> November 2012 Denial Order, 141 FERC ¶ 61,087 at P 30.

*first* determine which of the forward transactions in question, if any, should be mitigated, and *then* to propose the methodology for calculating refunds”<sup>176</sup> were clear.

103. Given that FPA section 206 is the governing statutory provision for this part of the proceeding, the Commission’s language clearly indicates a three-step directive to resolve any refund issues with respect to the forward transactions. The first step is to determine which transactions “should be mitigated”<sup>177</sup> or “are subject to mitigation.”<sup>178</sup> However, the Commission did not make clear to what extent, if any, the *Mobile-Sierra* doctrine would apply when determining which transactions would be mitigated. The second step is to develop a mitigation methodology for the forward transactions. The third step is to calculate the refunds. Therefore, this Initial Decision will apply this three step analysis.

### **C. Unjust and Unreasonable Finding and Analysis**

#### **1. The Mobile-Sierra Doctrine Does Not Apply**

104. The *Mobile-Sierra* standard does not apply, as the forward transactions are governed by a *Memphis Clause* that prevents application of the standard.<sup>179</sup> Further, the Commission did not engage in a *Mobile-Sierra* analysis when it mitigated the out-of-market (OOM) transactions of 24 hours or less in the prior proceeding.<sup>180</sup> These OOM transactions were also bilateral contracts that were negotiated outside of the CAISO organized markets.

105. The *Mobile-Sierra* doctrine creates a presumption that negotiated contract rates meet the FPA’s “just and reasonable” requirement.<sup>181</sup> This presumption “may be

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<sup>176</sup> *Id.* P 32 (emphasis added).

<sup>177</sup> *Id.*

<sup>178</sup> Remand Order, 129 FERC ¶ 61,147 at P 4.

<sup>179</sup> See *United Gas Pipe Line Co. v. Memphis Light, Gas & Water Div.*, 358 U.S. 103, 110-13 (1958).

<sup>180</sup> With respect to the OOM transactions, the Commission’s order or the *CPUC Decision* that mitigated the OOM transactions did not reference the *Mobile-Sierra* doctrine or the public interest standard. See *San Diego Gas & Elec. Co.*, 96 FERC ¶ 61,120 at 61,515-61,519; *CPUC Decision*, 462 F.3d at 1051-53.

<sup>181</sup> The name of the doctrine is derived from two Supreme Court cases that  
(continued)



overcome only if FERC concludes that the contract seriously harms the public interest,” which is often referred to as the public interest standard.<sup>182</sup> However, the *Mobile-Sierra* doctrine’s public interest standard is not a wholly different standard, but rather “refers to the differing application of th[e] just-and-reasonable standard to contract rates.”<sup>183</sup> Regarding the threshold determination of whether to apply the public interest test, its application is only appropriate when freely negotiated bilateral contracts are the subject of the FPA section 206 action.<sup>184</sup>

106. Shortly after the establishment of the *Mobile-Sierra* doctrine, the Supreme Court established a rule that parties have the authority to contract out of the *Mobile-Sierra* presumption by express language in their contract.<sup>185</sup> In establishing this rule, the Supreme Court stated:

The important and indeed decisive difference between this case and *Mobile* is that in *Mobile* one party to a contract was asserting that the Natural Gas Act somehow gave it the right unilaterally to abrogate its contractual undertaking, whereas here petitioner seeks simply to assert, in accordance with the procedures specified by the Act, rights expressly reserved to it by contract.<sup>186</sup>

107. Such a contract term has come to be known as a *Memphis Clause*<sup>187</sup> and was further described in a recent Supreme Court case:

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established the presumption, *United Gas Pipe Line Co. v. Mobile Gas Serv. Corp.*, 350 U.S. 332 (1956) and *FPC v. Sierra Pac. Power Co.*, 350 U.S. 348 (1956).

<sup>182</sup> *Morgan Stanley Capital Group Inc. v. Pub. Util. Dist. No. 1 of Snohomish County, Wash.*, 554 U.S. 527, 530 (2008).

<sup>183</sup> *Id.* at 535.

<sup>184</sup> *Id.* at 530.

<sup>185</sup> *United Gas Pipe Line Co. v. Memphis Light, Gas & Water Div.*, 358 U.S. 103, 110-13 (1958).

<sup>186</sup> *Id.* at 112 (1958).

<sup>187</sup> *California ex rel. Brown*, 140 FERC ¶ 61,115 at P 9 n.26 (2012) (“In *United* (continued)

Over the past 50 years, decisions of this Court and the Courts of Appeals have refined the *Mobile-Sierra* presumption to allow greater freedom of contract. In *United Gas Pipe Line Co. v. Memphis Light, Gas and Water Div.*, we held that parties could contract out of the *Mobile-Sierra* presumption by specifying in their contracts that a new rate filed with the Commission would supersede the contract rate....Thus, as the *Mobile-Sierra* doctrine has developed, regulated parties have retained broad authority to specify whether FERC can review a contract rate solely for whether it violates the public interest or also for whether it results in an unfair rate of return.<sup>188</sup>

108. The CAISO tariff includes two separate provisions that together serve to prevent applying the *Mobile-Sierra* presumption to the review of these forward transactions. The first provision is section 2.3.5.1.5, which states:

If, after receiving all bids, the [CA]ISO still is unable to comply with the Applicable Reliability Criteria, the [CA]ISO shall, acting in accordance with Good Utility Practice, take such steps as it considers to be necessary to ensure compliance, including the negotiation of contracts through processes other than competitive solicitations.<sup>189</sup>

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*Gas Pipeline Co. v. Memphis Light and Water Div.*, the Supreme Court held that parties could contract out of the *Mobile-Sierra* presumption by specifying in their contracts that a new rate filed with the Commission would supersede the contract rate. Such a clause has come to be known as a ‘Memphis’ clause.”) (internal citations omitted).

<sup>188</sup> *Morgan Stanley Capital Group Inc. v. Pub. Util. Dist. No. 1 of Snohomish County, Wash.*, 554 U.S. 527, 534 (2008) (internal citations omitted); *see also* David G. Tewksbury et al., *New Chapters in the Mobile-Sierra Story: Application of the Doctrine after NRG Power Marketing, LLC v. Maine Public Utilities Commission*, 32 Energy L.J. 433, 443-44 (2011) (“[T]he FERC is obligated to apply the *Mobile-Sierra* presumption to any and all challenges to those rates (unless, of course, the contracting parties have opted out of the *Mobile-Sierra* regime through a Memphis clause).”).

<sup>189</sup> Ex. CAX-100 at 70 (CAISO Tariff section 2.3.5.1.5).

109. The CAISO exercised its authority under this provision to engage in bilaterally negotiated forward transactions outside of the CAISO's organized markets. In a prior proceeding the Commission found that another type of non-auction, bi-lateral transaction, OOM sales of 24 hours or less, were carried out under section 2.3.5.1.5 and that "to the extent it [the seller] was compensated for these transactions, that compensation was made pursuant to section 2.3.5.1.5 of the CAISO Tariff."<sup>190</sup> This holding was rendered despite the arguments by a seller that the transactions were made pursuant to another agreement, an argument that the Commission had rejected.<sup>191</sup>

110. A *Memphis Clause* itself is found in section 19 of the CAISO tariff and titled as "Regulatory Filings," which states:

Any amendment or other modification of any provision of this [CA]ISO Tariff must be in writing and approved by the [CA]ISO Governing Board in accordance with the bylaws of the [CA]ISO. Any such amendment or modification shall be effective upon the date it is permitted to become effective by FERC. Nothing contained herein shall be construed as affecting, in any way, the right of the [CA]ISO to furnish its services in accordance with this [CA]ISO Tariff, or any tariff, rate schedule or SC Agreement which results from or incorporates this [CA]ISO Tariff, unilaterally to make an application to FERC for a change in rates, terms, conditions, charges, classifications of service, SC [schedule coordinator] Agreement, rule or regulation under FPA Section 205 and pursuant to the FERC's rules and regulations promulgated thereunder. *Nothing contained in this [CA]ISO Tariff or any SC Agreement shall be construed as affecting the ability of any Market Participant receiving service under this [CA]ISO Tariff to exercise its rights under Section 206 of the FPA and FERC's rules and regulations thereunder.*<sup>192</sup>

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<sup>190</sup> *San Diego Gas & Elec. Co.*, 109 FERC ¶ 61,218 at PP 66-67 (2004), *order on reh'g*, 110 FERC ¶ 61,336 at PP 66-67 (2005) (affirming that the "transactions were made pursuant to the specific terms of the CAISO Tariff.").

<sup>191</sup> *San Diego Gas & Elec. Co.*, 109 FERC ¶ 61,218 at P 67 n.96 (2004).

<sup>192</sup> Ex. CAX-100 at 497 (CAISO Tariff section 19) (emphasis added).

111. These forward transactions were created pursuant to the CAISO tariff. The tariff includes a *Memphis Clause* that preserves the standard rights of market participants under section 206 of the FPA. This Initial Decision finds therefore that the forward contracts must be evaluated pursuant to the ordinary just and reasonable standard rather than the heightened *Mobile-Sierra* presumption and its required public interest analysis.

112. Neither the Commission nor the Ninth Circuit applied the *Mobile-Sierra* public interest analysis to the OOM transactions that have already been mitigated.<sup>193</sup> These mitigations appear to have involved only the just and reasonable analysis and therefore comport with the Memphis Clause. The previously mitigated OOM transactions are functionally identical to the forward transactions in this proceeding. The only difference with respect to these two classes of transactions relates to their duration of delivery, with the previously mitigated OOM transactions possessing durations of 24 hours or less,<sup>194</sup> while forward transactions are defined as having durations of more than 24 hours.<sup>195</sup>

## 2. Forward Transactions Are Unjust and Unreasonable

113. The forward transactions are found to be unjust and unreasonable and subject to mitigation on the basis of the record evidence in this proceeding. When measured against the MMCP, the forward transactions are easily discernable as unjust and unreasonable and this Initial Decision so finds. The Commission has accepted “the MMCP to serve as a just and reasonable proxy for the rates that a competitive energy market would have produced in the CAISO and CalPX markets during the Refund Period.”<sup>196</sup> The MMCPs

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<sup>193</sup> With respect to the OOM transactions, there is no reference to the *Mobile-Sierra* doctrine or the public interest standard in the portions of the Commission’s order or the *CPUC Decision* that mitigated the OOM transactions. See *San Diego Gas & Elec. Co.*, 96 FERC ¶ 61,120 at 61,515-61,519; *CPUC Decision*, 462 F.3d at 1051-53.

<sup>194</sup> *CPUC Decision*, 462 F.3d at 1051 (describing the mitigated OOM transactions as “purchases [that] were made by Cal-ISO from sellers outside the Cal-ISO single price auction market within 24 hours or less of delivery”).

<sup>195</sup> Rehearing Order, 135 FERC ¶ 61,183 at P 40.

<sup>196</sup> *San Diego Gas & Elec. Co.*, 127 FERC ¶ 61,250 at P 12 (2009). The following is an abridged overview of the history and methodology underlying the MMCP, as excerpted from the order cited in this footnote:

(continued)

for the Refund Period are presented in the record by the Complainants in exhibits CAX-134 and CAX-135.<sup>197</sup> The record also includes the list of identified forward transactions, which is not disputed by any party to the proceeding.<sup>198</sup> The refund methodology and associated calculations by Complainant's expert witness Dr. Berry provide record evidence of all the instances in which the forward transactions exceeded the MMCP, which the Commission has accepted as the benchmark for the just and reasonable rates, and which thereby provides record evidence that the forward transactions are unjust and unreasonable.<sup>199</sup> None of the Respondents presented any credible evidence to challenge these MMCP calculations.

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The refund methodology substitutes the MMCP for the market clearing price in the CAISO and [Cal]PX markets during the Refund Period, for intervals when the market clearing price was higher than the MMCP. The MMCP formula endeavors to approximate the marginal cost of the last unit dispatched to meet load in the CAISO and [Cal]PX real-time markets, as adjusted to reflect various inputs (natural gas prices, adders for non-fuel costs such as operations and maintenance and a 10 percent risk premium/creditworthiness adder). The MMCP formula's factor for the cost of the fuel used to generate the electricity sold in those markets is based upon the heat rate of the marginal unit, as well as miscellaneous costs, e.g., transportation. Thus, in order to determine each seller's refund liability, the MMCP was developed and applied to gross sales on a 10-minute interval basis, consistent with the CAISO's market pricing rules at the time. The reasonableness of this approach lies in the fact that for each interval the marginal unit and related heat rate would vary, as would the marginal costs.

<sup>197</sup> See Ex. CAX-110 at 89 n.65 (revised Mar. 26, 2012); Tr. at 2184:14-19.

<sup>198</sup> Ex. CAX-110 at 87-88 (revised Mar. 26, 2012); Ex. CAX-260 at 97 (revised Mar. 26, 2012); Tr. at 1127:17-1128:24.

<sup>199</sup> Ex. CAX-110 at 90 (revised Mar. 26, 2012); Ex. CAX-136; Tr. at 2184:6-13.

114. This finding that the rates were not just and reasonable also accords with language from the *CPUC Decision*, which stated that “[a]pplication of the MMCP was a *determination* that a rate was unjust and unreasonable.”<sup>200</sup> Similarly here, the record allows the MMCP to be applied to a set of transactions, and the extent to which those transactions exceed the MMCP provides record evidence that those transactions are unjust and unreasonable.

115. Through factual evidence, the Complainants also appropriately linked the forward transactions to the “systemic dysfunction in the wholesale energy market”<sup>201</sup> and to the functionally indistinguishable OOM transactions that the Commission previously established as unjust and unreasonable. The Commission and the Ninth Circuit have already determined that OOM transactions during this same Refund Period are subject to mitigation.<sup>202</sup> The Complainants have demonstrated in the record that forward transactions are essentially the same as the OOM sales, except for their respective time durations.<sup>203</sup> Both transactions were “arranged outside of the normal auction processes” and are bilaterally negotiated between the CAISO and an energy seller.<sup>204</sup> Therefore the *CPUC Decision*’s holding that the Commission has already found the OOM transactions to be unjust and unreasonable,<sup>205</sup> should be equally applicable to the forward transactions at issue in this proceeding. This reasoning is in accord with the Commission’s observation of the interconnected nature of the unjust and unreasonable prices that transpired during the Crisis Period, prompting the Commission to state that “[t]here is a critical interdependence among the prices in the [CA]ISO’s organized spot markets, the

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<sup>200</sup> *CPUC Decision*, 462 F.3d at 1052 (emphasis added).

<sup>201</sup> *Id.* at 1052.

<sup>202</sup> *San Diego Gas & Elec. Co.*, 96 FERC ¶ 61,120 at P 5 (July 25, 2001) (“Several parties request clarification that the ISO’s out-of-market (OOM) purchases are subject to refund. We grant this clarification.”); *CPUC Decision*, 462 F.3d at 1051-53.

<sup>203</sup> CAX-110 at 86-87 (revised Mar. 26, 2012).

<sup>204</sup> *Id.* at 86.

<sup>205</sup> In discussing the OOM transactions and whether they were found to be unjust and unreasonable, the court stated “[a]pplication of the MMCP was a determination that a rate was unjust and unreasonable” and that the “facts constituted a sufficient finding that the rates were unjust and unreasonable.” *CPUC Decision*, 462 F.3d at 1052.

prices in the bilateral spot markets in California and the rest of the West, and the prices in forward markets.”<sup>206</sup>

116. The Respondents and Staff advocate that the Presiding Judge cannot consider certain evidence, submitted by the Complainants, on the topic of the unjustness and unreasonableness of the forward transactions because such evidence was submitted for the first time on rebuttal and not as part of the Complainants’ direct case-in-chief.<sup>207</sup> The Respondents and Staff emphasize that the Complainants initially argued that the Commission had previously determined that the forward transactions were unjust and unreasonable, and therefore they were not required to make this showing in this hearing.

117. The Respondents and Staff’s procedural argument relies in part on an initial decision by former Administrative Law Judge George P. Lewnes. However, they quote selectively from this decision and fail to include the below passage that demonstrates the discretion of judges on whether to hear such evidence:

[I]n the discretion of the Presiding Judge, the scope of rebuttal may be extended as well as limited. Occasionally, an applicant will have inadvertently omitted an item of proof during the presentation of its direct case. If this omitted proof is not merely cumulative and the delay in presenting it will not unduly prejudice the other participants, the Presiding Judge may admit this proof during the rebuttal stage of the case. The Presiding Judge has discretion to admit even cumulative direct-case proof in rebuttal, but ordinarily is unlikely to do so.<sup>208</sup>

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<sup>206</sup> *San Diego Gas & Elec. Co.*, 95 FERC ¶ 61,418, at 62,547 (2001).

<sup>207</sup> See Respondent Common Issues Initial Br. at 48 (“Under clear Commission precedent, the California Parties were required to support fully their allegations in their direct case.”); Staff Initial Br. at 18 (“Since the California Parties did not attempt to make a showing that the rates being charged for Multi-Day Sales and Energy Exchanges were unjust and unreasonable until their rebuttal case, the Presiding Judge and the Commission have no choice except to reject the California Parties’ presentation on procedural grounds.”).

<sup>208</sup> *Cal. Edison Co. & San Diego Gas & Elec. Co.*, 50 FERC ¶ 63,012, at 65,065 (1990) (J. Lewnes); see also *Columbia Gas Transmission Corp.*, 58 FERC ¶ 63,014, at 65,046 (1992); see also *Cal. Indep. Sys. Operator Corp.*, 134 FERC ¶ 61,140 at P 4 (Feb. (continued))

118. However, a review of the record does not reveal that the issue of justness and reasonableness of the forward transactions first arose in the rebuttal case. First, in exhibit CAX-110 at 88-89, Dr. Berry discusses in her pre-filed direct testimony that these same rates were unreasonable and the role of the MMCP in making that determination. Second, during the hearing, all of her testimony on the unreasonableness of the forward transactions was solicited under cross-examination.<sup>209</sup> Third, the other witness of the Complainants to discuss the unreasonableness of these transactions was Dr. Stern, and his answers were also solicited under cross-examination.<sup>210</sup>

119. Assuming for the sake of argument that these statements were rebuttal evidence, they amounted to nothing more than a lay opinion of the witnesses that the Commission had previously determined that the forward transaction rates were unjust and unreasonable. No actual evidence was proffered, other than evidence already in the record. No prejudice to Respondents is discerned by these statements and clearly the statements could not have been unexpected when prodded out under cross-examination. Further, all parties fully argued the just and reasonableness issue in the hearing and in the briefs. Therefore, assuming without deciding that this evidence was submitted for the first time in rebuttal and not in the case-in-chief, the procedural context of its occurrence rendered it completely harmless and non-prejudicial to the parties. In addition, this Initial Decision clearly finds that a just and reasonable showing as to the forward transactions is required for a *prima facie* case. This Initial Decision also notes the considerable disagreement of the parties as to the Commission's directive with respect to the forward transactions. As evidenced by a Commission order as recent as November 2, 2012, the Commission continues to receive and respond to questions from parties as to whether the "Commission did not prejudge the issue of whether these [forward] transactions should automatically be subject to mitigation."<sup>211</sup>

120. The Complainants submitted a refund methodology under which forward transactions are evaluated by reviewing each sale on an hour-by-hour basis and then

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28, 2011) (accepting an answer to a protest, which otherwise would have been prohibited under 18 C.F.R. § 385.213(a) (2012)).

<sup>209</sup> See Tr. at 1151-53, 1239, 1243-44, 1262-64.

<sup>210</sup> See Tr. at 868-71.

<sup>211</sup> November 2012 Denial Order, 141 FERC ¶ 61,087 at P 30.



applying the MMCP to each transaction.<sup>212</sup> The rates for hours that are lower than, or equal to, the MMCP are not mitigated, while the rates that are higher than the MMCP are mitigated by the amounts charged above the MMCP.<sup>213</sup> No Respondents have proposed an alternative refund methodology.<sup>214</sup>

121. This Initial Decision finds that the MMCP refund methodology as submitted by the Complainants is appropriate to calculate the forward transaction refunds. This adopted methodology is consistent with the process that is already accepted by the Commission to mitigate the OOM transactions that share the same features as forward transactions except for their shorter duration.<sup>215</sup>

#### **D. Evidence of the Forward Transactions Subject to Mitigation**

122. The CAISO has already identified the list of forward transactions during the Refund Period.<sup>216</sup> No Respondent to the proceeding disputes this list.<sup>217</sup> As the forward transactions have been found to be unjust and reasonable under the MMCP, they are subject mitigation as indicated below.

123. Constellation's forward transaction took the form of a single, continuous sale to the CAISO, starting on December 6, 2000, at Hour Ending (HE) 16, and ending on December 12, 2000, at HE 24.<sup>218</sup> This continuous sale was comprised of three

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<sup>212</sup> Ex. CAX-110 at 89 (revised Mar. 26, 2012); Ex. CAX-260 at 99 (revised Mar. 26, 2012).

<sup>213</sup> Ex. CAX-260 at 98-99 (revised Mar. 26, 2012).

<sup>214</sup> *Id.* at 101.

<sup>215</sup> Ex. CAX-110 at 88-89 (revised Mar. 26, 2012).

<sup>216</sup> *Id.* at 87.

<sup>217</sup> Ex. CAX-260 at 97 (revised Mar. 26, 2012).

<sup>218</sup> Ex. CEI-1 at 6-7; Ex. CEI-2 at 9.

segments.<sup>219</sup> The Commission already mitigated the second of the three segments, which is therefore not subject to any additional mitigation.<sup>220</sup>

124. BPA completed two forward transactions that are subject to mitigation, including a transaction entered into on December 26, 2000 with the CAISO for 15,000 MWh/day for the period December 27-31, 2000, at a price of \$270/MWh, and another transaction entered into on January 2, 2001 with the CAISO for whatever available surplus energy BPA had for the period January 3-8, 2001, at a price tied to daily market prices.<sup>221</sup>

125. Powerex completed two forward transactions subject to mitigation, including a transaction entered into on November 20, 2000 with the CAISO for 400 MW, around the clock, from November 21-December 3, 2000, at a price of \$250/MWh, and another transaction entered into on November 29, 2000 with the CAISO for 100 MW, around the clock, from December 4-31, 2000, at a price of \$280/MWh.<sup>222</sup>

#### **E. Calculated Refunds Pursuant to the Proposed Methodology**

126. Pursuant to the list of identified forward transactions, the Complainants applied their refund methodology, as adopted by this Initial Decision, and calculated total refunds of \$45,270,367.<sup>223</sup> This figure constitutes the Presiding Judge's finding as to the total amount of forward transaction refunds due in this proceeding. While the Respondents contend that forward transactions should not be mitigated at all, no credible challenges were made to the calculations pursuant to this methodology.<sup>224</sup>

127. In accord with the calculations as submitted by the Complainants, the individual refund amounts for the three Respondents found to have completed forward transactions that are subject to mitigation are as follows: Powerex (\$27,369,839); BPA (\$15,055,504);

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<sup>219</sup> Ex. CEI-1 at 7-8.

<sup>220</sup> *Id.* at 6.

<sup>221</sup> Ex. BPA-001 at 93-94.

<sup>222</sup> Ex. POW-254 at 159-60 (revised Nov. 14, 2011).

<sup>223</sup> Ex. CAX-110 at 91 tbl.13 (Price Correction and Refunds Owed for Multi-day Sales through the ISO During the Refund Period) (revised Mar. 26, 2012).

<sup>224</sup> Ex. CAX-260 at 101 (revised Mar. 26, 2012).

and Constellation (\$2,845,024).<sup>225</sup> The above calculated figures do not include interest. None of the Respondents presented any evidence of cost offsets.<sup>226</sup>

## **II. Energy Exchange Transactions**

### **A. Energy Exchange Transactions Defined**

128. The Commission has defined an energy exchange transaction as “a transaction where a party provides energy to the CAISO and the CAISO pays back the energy in kind in subsequent hours at an exchange ratio.”<sup>227</sup> The Ninth Circuit has further articulated the dynamics of this transaction as follows:

Exchange transactions involved two sellers. The first seller, the “Exchange Seller,” agreed to provide Cal-ISO [CAISO] with energy in exchange for an in-kind return of the same amount of energy plus an additional agreed-upon amount. Cal-ISO [CAISO] then purchased energy from the second seller, the “Spot Seller,” on the spot market and used that energy to pay back the Exchange Seller.<sup>228</sup>

### **B. The Relevant Law and the Commission’s Directive**

129. The governing law for the energy exchange transactions in this proceeding is FPA section 206, which authorizes market participants to file a complaint with the Commission to complain that rates are unjust and unreasonable.<sup>229</sup> As noted above, such a complaint was filed by SDG&E in August 2000 on the basis of the heightened energy prices stemming from the Crisis Period.<sup>230</sup> After an investigation, the Commission

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<sup>225</sup> Ex. CAX-110 at 91 tbl.13 (Price Correction and Refunds Owed for Multi-day Sales through the ISO During the Refund Period) (revised Mar. 26, 2012).

<sup>226</sup> Remand Order, 129 FERC ¶ 61,147 at P 28.

<sup>227</sup> *San Diego Gas & Elec. Co.*, 102 FERC ¶ 61,317 at P 153 (2003).

<sup>228</sup> *CPUC Decision*, 462 F.3d at 1059.

<sup>229</sup> 16 U.S.C. § 824e(a) (2006).

<sup>230</sup> *San Diego Gas & Elec. Co.*, 92 FERC ¶ 61,172, at 61,603 (2000). Certain parties to this proceeding, including PG&E and the State of California, joined the

(continued)

established a Refund Period of October 2, 2000 through June 20, 2001,<sup>231</sup> however the Commission later declined to mitigate the energy exchange transactions that arose during this period, primarily due to the difficulty to calculate a refund for this transaction type.<sup>232</sup> In the *CPUC Decision*, the Ninth Circuit held that it was improper to exclude exchange transactions on that basis, leading to the proceeding at hand.

130. Similar to the forward transactions above, the parties again urge competing interpretations of the precise task that the Commission has directed the Presiding Judge to perform with respect to the energy exchange transactions. Despite the disagreement, a review of the plain language of the Commission's orders eliminates the ambiguity.

131. With respect to the energy exchange transactions, the Remand Order states that "the ALJ [Presiding Judge] *will* devise the refund methodology for these transactions and *will* calculate the refunds based on that methodology."<sup>233</sup> Later in the Remand Order, the Commission reiterates that "[w]e *instruct* the ALJ [Presiding Judge] to propose a refund methodology applicable to energy exchange transactions and to calculate the refunds."<sup>234</sup> This language is a unilateral directive to adopt a refund methodology and to calculate refunds. Completely absent are any directions which require the Presiding Judge to determine which transactions are subject to mitigation, as was required with the forward transactions. A fair reading here clearly shows that the Commission has predetermined for this hearing that the exchange transactions are unjust and unreasonable and that no further finding in this regard is necessary. The only mandate here is to move forward with mitigation.

132. Some of the parties advocate that the three step analysis required by the Commission for the forward transactions should also be applied to the energy exchange transactions.<sup>235</sup> However, these parties fail to note that the Commission has repeatedly

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complaint. *CPUC Decision*, 462 F.3d at 1041.

<sup>231</sup> *CPUC Decision*, 462 F.3d at 1041.

<sup>232</sup> *San Diego Gas & Elec. Co.*, 102 FERC ¶ 61,317, at 62,084 (2003).

<sup>233</sup> Remand Order, 129 FERC ¶ 61,147 at P 4 (emphasis added).

<sup>234</sup> *Id.* P 30 (emphasis added).

<sup>235</sup> See, e.g., Staff Reply Br. at 98-99 (stating that, as to the forward transactions, the Commission "conclusively rejects...that the only issue on the table in this hearing is the appropriate methodology by which to implement those refunds" and that this

(continued)

used separate and distinct directives to inform the task at hand for the Presiding Judge with respect to these two transaction categories. For energy exchange transactions, the Commission's directions are only to "propose a refund methodology"<sup>236</sup> and to "calculate the refunds."<sup>237</sup> For forward transactions the Commission's directive states a precursor obligation to "determine which of those transactions, if any, are subject to mitigation,"<sup>238</sup> and then a latter step to "calculate appropriate refunds."<sup>239</sup> In the proceeding at hand, the Commission has ascribed two different responsibilities to the Presiding Judge with respect to forward transactions and energy exchange transactions.

133. The Remand Order also observes, "[w]e also note that certain energy exchange transactions have already been mitigated to the extent they were purchases by the CAISO to return energy in-kind."<sup>240</sup> A central tenet of the FPA is to prevent actions that are "unduly discriminatory."<sup>241</sup> The logical import of this principle to the transactions at hand is that if part of an exchange transaction has already been mitigated, the remainder also should be accorded comparable action. The acknowledged partial mitigation of the energy exchange transactions serves as a strong basis for the view that the Commission has already determined that the totality of energy exchange transactions were unjust and unreasonable.

134. The Ninth Circuit's *CPUC Decision* also reinforces the Commission's directions for energy exchange transactions and the implications that flow from those directions. That decision and FERC's appellate brief for that case reject the calls of the parties for express and individualized unjust and unreasonable findings for every specific transaction

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Commission pronouncement "should be equally applicable to energy exchanges.").

<sup>236</sup> Remand Order, 129 FERC ¶ 61,147 at P 30; *see also* Remand Order, 129 FERC ¶ 61,147 at P 4 (using essentially the equivalent language, "devise the refund methodology").

<sup>237</sup> Remand Order, 129 FERC ¶ 61,147 at PP 4, 30.

<sup>238</sup> *Id.* P 4; *see also Id.* P 28 (using essentially the equivalent language, "determine which [] forward market transactions are subject to mitigation").

<sup>239</sup> *Id.* PP 4, 28.

<sup>240</sup> *Id.* P 30.

<sup>241</sup> *See, e.g.,* 16 U.S.C. § 824e(a) (2006).

category.<sup>242</sup> However, certain Respondents continue to renew those unsuccessful demands here. In the *CPUC Decision* one of the parties argued against the Commission's imposition of relief for OOM transactions on the basis that "FERC made no express finding that the rates charged for OOM sales were unjust and unreasonable."<sup>243</sup> In denying this argument, the Ninth Circuit stated that the "Federal Power Act does not require the detailed individualized finding" as urged by the party and that FERC's finding "that there was systemic dysfunction in the wholesale energy market and that, during the time the Cal-ISO [CAISO] was making OOM purchases...constituted a sufficient finding that the rates were unjust and unreasonable."<sup>244</sup>

135. Another parallel that can be drawn between the *CPUC Decision* and the Commission's orders establishing the parameters for this hearing is the *CPUC Decision* statement that "[a]pplication of the MMCP was a determination that a rate was unjust and unreasonable." Applied here, the fact the Remand Order mandates that "the ALJ [Presiding Judge] will devise the refund methodology" and "will calculate the refunds" for energy exchange transactions reinforces the implication that this class of transactions already has been found to be unjust and unreasonable.<sup>245</sup>

136. Consistent with the Commission's orders, this Initial Decision makes no findings with respect to the justness and reasonableness of the energy exchange transactions. The stated task for the Presiding Judge is to evaluate the evidence and arguments as submitted by the parties as to an appropriate refund methodology and to calculate the refunds for the energy exchange transactions as supported by the evidence.

### **C. Description of the Submitted Refund Methodology**

137. The Complainants submitted a proposed refund methodology for the energy exchange transactions.<sup>246</sup> The methodology is premised on the MMCP refund methodology that has been approved by the Commission in prior proceedings. No other

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<sup>242</sup> *CPUC Decision*, 462 F.3d at 1052.

<sup>243</sup> *Id.* at 1051.

<sup>244</sup> *Id.* at 1052.

<sup>245</sup> Remand Order, 129 FERC ¶ 61,147 at P 4.

<sup>246</sup> California Parties Initial Br. at 248-52.

parties proposed refund or calculation methodologies.<sup>247</sup> The lone submitted methodology is described below.

138. The Complainants' refund methodology is a cost monetization scheme in which "the monetized cost of an Energy Exchange is the total amount (in dollars) that the CAISO spent to acquire the return energy used to pay for the Energy Exchange... [whereby] refunds should be calculated by subtracting the amount that should have been paid (the MMCP) from the amount that actually was paid (taking into account the prior mitigation of the return energy)." <sup>248</sup>

139. The above described methodology is best articulated through an example with actual numbers, as presented by a series of excerpts from exhibit CAX-110:

We know that [exchange] sellers were actually paid in return energy. The source of this energy was purchases in the [CA]ISO market during various hours. The [CA]ISO has a record of the total amount (dollars spent) to buy the return energy. For any exchange sale to the [CA]ISO market, the monetized cost equals the total amount (\$) that the [CA]ISO market spent to acquire the associated return energy. For example, if the [CA]ISO bought 1 MW in an energy exchange sale and returned 2 MW in some later hour when it cost \$300/MWh to buy energy, the [CA]ISO market would have incurred a cost of \$600 for the original 1 MWh purchase...

The [CA]ISO market originally procured power at unmitigated prices, but most procurement has now been mitigated (though some sales in the [CA]ISO market were determined to be exempt from refunds), which reduces the cost to the [CA]ISO market of the exchange transaction. For example, if the MMCP in the hour the return energy was procured in the above example was \$120/MWh, then the \$300/MWh procurement from other sellers would have been mitigated down to \$120/MWh, reducing the overall cost to

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<sup>247</sup> Ex. CAX-260 at 125 (revised Mar. 26, 2012); *see also* Tr. at 2183:16-24.

<sup>248</sup> California Parties Initial Br. at 249-50.

the [CA]ISO market for the original 1 MWh of energy down to 2 times \$120 equals \$240, instead of the original \$600...

The original cost to the [CA]ISO market in my example, which is illustrative of all such transactions, was \$600. After MMCP mitigation of sales by other sellers (who sold the energy that was then delivered to the exchange seller), the cost to the [CA]ISO market is reduced substantially to \$240. But as I explained above, the Commission has established that the just and reasonable benchmark for energy procured in any given hour is the MMCP in that hour. So the \$240 cost to the [CA]ISO market for procuring the return energy needs to be compared to the MMCP price in the hour in which the exchange energy was originally procured. For example, if the MMCP in the hour in which the energy was procured was \$150/MWh, then the exchange seller would have cost the [CA]ISO market \$90 more than the Commission has found reasonable for 1 MWh of energy purchased in that hour...

Total refunds or price mitigation are calculated as the amount actually paid (after mitigation of the energy procured for the return) minus the amount that should be paid at mitigated prices. In my example above, the amount would be \$90.<sup>249</sup>

#### **D. The Proposed Refund Methodology**

140. As described above, the Commission's orders require the Presiding Judge to propose a refund methodology for energy exchange transactions. Only one refund methodology was submitted, that of the Complainants as detailed above. While many parties to the proceeding assumed the position that reviewing potential refund methodologies should not even be engaged,<sup>250</sup> none presented alternative refund

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<sup>249</sup> Ex. CAX-110 at 97-98 (revised Mar. 26, 2012).

<sup>250</sup> See, e.g., Respondent Common Issues Initial Br. at 265 (titling Section XII.C: "The California Parties Did Not Prove by a Preponderance of the Evidence that the Multi-Day and Energy Exchange Transactions Should be Mitigated; Thus, It Is Not Necessary to Reach the Issue of What Methodology Should be Used to Mitigate These Transactions.").



methodologies. Therefore, after a comprehensive review of the attributes of energy exchange transactions and the market context in which these transactions were made, this Initial Decision finds that the Complainants methodology is appropriate to calculate energy exchange transaction refunds.

141. While the adopted methodology itself is not particularly intricate and involves rudimentary addition and subtraction on the basis of various inputs, it is worthwhile to acknowledge that the market landscape and the multitude of interconnected variables that underpin the refund calculations are complex. The Commission recognized these challenges in a prior proceeding when it decided not to award refunds for energy exchange transactions “because it [the refund methodology] did not account for all relevant variables,”<sup>251</sup> observing for example that the “CA Parties’[Complainants]’ request to reform the exchange ratio completely ignores the severe energy shortfall in the Pacific Northwest, where most of these energy exchange transactions originated, during the 2001 time period.”<sup>252</sup> However, the Ninth Circuit rejected the position that relief may be denied just because calculating refunds is challenging,<sup>253</sup> and based on this holding the Commission in turn “instruct[ed] the ALJ [Presiding Judge] to propose a refund methodology applicable to energy exchange transactions and to calculate the refunds.”<sup>254</sup>

142. One of the chief arguments by the Respondents to refute the legitimacy of any refunds for energy exchange transactions is that it is too difficult to account for the challenging variable of exchange sellers’ individual costs of providing energy to the CAISO.<sup>255</sup> While such variables must be considered to reach an appropriate

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<sup>251</sup> *CPUC Decision*, 462 F.3d at 1060 (recounting the Commission’s rationale for rejecting the refund methodology).

<sup>252</sup> *San Diego Gas & Elec. Co.*, 102 FERC ¶ 61317 at P 154 (2003); *see also* Ex. BPA-001 at 90 (contending that energy exchange transactions cannot be reconstructed into a “pure cash transaction that views the two legs of the transaction in isolation and does not capture the overall economic value of the exchange agreement”).

<sup>253</sup> *CPUC Decision*, 462 F.3d at 1060 (“By refusing relief simply because the calculation was difficult, FERC abandoned its duty under the Federal Power Act to ensure just and reasonable rates.”).

<sup>254</sup> Remand Order, 129 FERC ¶ 61,147 at P 30.

<sup>255</sup> *See, e.g.*, Constellation Br. at 10-16; Respondent Common Issues Initial Br. at 242-69; Powerex Br. at 127-36; BPA Br. at 58-70.

methodology, the primary goal on which the refund methodology must be premised is ensuring that just and reasonable prices are paid,<sup>256</sup> and given these collective objectives, the adopted refund methodology must appropriately capture these variables.

143. The merits of the adopted refund methodology are many. Of foremost significance, the refund methodology monetizes the energy exchange transactions by relying on Commission approved MMCPs, a benchmark that has been rigorously vetted through a series of Commission and federal court cases and consistently upheld as the most appropriate method to calculate the refunds that were made necessary as a result of the California energy crisis.

144. The Commission admonished against refund methodologies that would result in “double counting,” prompting the Commission to state in its Remand Order that “[w]e will not allow reconsideration of the already mitigated transactions. Energy exchange transactions entered into during the Refund Period will be subject to refund only to the extent they have not been mitigated.”<sup>257</sup> The proposed refund methodology satisfies this requirement, as evidenced by Staff witness Mr. Siskind who stated during the hearing that the Complainants’ methodology factors in the Commission’s prior mitigation of the relevant component of the energy exchange transactions and does not double count.<sup>258</sup>

### **E. Evidence of the Energy Exchange Transactions**

145. In response to a data request by Staff, the CAISO provided a list of all the transactions that constitute energy exchange transactions during the Refund Period.<sup>259</sup>

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<sup>256</sup> See *San Diego Gas & Elec. Co.*, 131 FERC ¶ 61,144 at P 2 (2010) (“As the Commission has explained, its primary objective during this proceeding has been to remedy rates that buyers may have paid for certain transactions above the zone of reasonableness for energy purchased from the California Independent System Operator Corporation (CAISO) or California Power Exchange (CalPX) during the Refund Period. This resulted in the creation of the mitigated market clearing price (MMCP) refund methodology. The Commission has balanced this objective with its concomitant statutory obligation to ensure that the MMCP does not result in a confiscatory rate for any individual seller.” (internal citations omitted)).

<sup>257</sup> Remand Order, 129 FERC ¶ 61,147 at P 30.

<sup>258</sup> Tr. at 10097:5-12.

<sup>259</sup> Ex. CAX-110 at 94 (revised Mar. 26, 2012).

The parties do not dispute the list.<sup>260</sup> The findings as to the specific energy exchange transactions of each respondent that should be subject to mitigation are listed in the paragraphs below.

146. Avista Energy completed a single energy exchange transaction with the CAISO that was entered into on December 19, 2000.<sup>261</sup> Under the transaction, Avista Energy delivered 1,575 MWh during peak hours on December 19, 2000, and the CAISO returned the energy to Avista Energy in 50 MWh increments during off-peak hours on December 21-24, 2000.<sup>262</sup>

147. A series of energy exchange transactions between BPA and CAISO were completed between November 14, 2000 and April 14, 2001.<sup>263</sup> Under the transactions, BPA provided 349,955 MWh of energy to the CAISO, and the CAISO returned 699,910 MWh of energy to BPA.<sup>264</sup>

148. Powerex completed four energy exchange transactions with the CAISO from December 17-25, 2000.<sup>265</sup> Powerex provided a total of 2,092 MWh and CAISO returned 4,184 MWh.<sup>266</sup> Under each transaction, Powerex received 2 MWh of energy for every 1 MWh that it provided to the CAISO.<sup>267</sup>

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<sup>260</sup> *Id.* at 94; Ex. CAX-260 at 97 (revised Mar. 26, 2012).

<sup>261</sup> Ex. AVI-1 at 71 (revised July 8, 2012).

<sup>262</sup> *Id.* at 71.

<sup>263</sup> Ex. CAX-137.

<sup>264</sup> *Id.*

<sup>265</sup> Ex. POW-203 at 125-26 (revised Nov. 14, 2011); Ex. POW-254 at 167-70 (revised Nov. 14, 2011).

<sup>266</sup> Ex. POW-254 at 167.

<sup>267</sup> Ex. POW-203 at 125-26 (revised Nov. 14, 2011); Ex. POW-254 at 167-70 (revised Nov. 14, 2011).

149. Three energy exchange transactions between WAPA and the CAISO were completed on March 19, 20, and 21, 2001.<sup>268</sup> Under the transactions, WAPA collectively provided the CAISO with 6,195 MWh of energy in return for 9,293 MWh.<sup>269</sup>

#### **F. Calculated Refunds Pursuant to the Proposed Methodology**

150. Pursuant to the list of identified energy exchange transactions, the Complainants applied their refund methodology, as adopted by this Initial Decision, and calculated total refunds of \$45,637,788.<sup>270</sup> This figure constitutes the total amount of energy exchange refunds due in this proceeding.

151. In accord with the calculations by the Complainants in “Revised Table 14: Price Correction and Refunds for Energy Exchange Sales Through the [CA]ISO” as contained in exhibit CAX-260,<sup>271</sup> the individual refund amounts for the four Respondents that were found to have engaged in energy exchange transactions are as follows: BPA (\$44,536,824); WAPA (\$621,377); Powerex (\$300,376); and Avista Energy (\$179,211).<sup>272</sup>

152. The above calculated figures do not include interest. No Respondents presented any evidence of cost offsets in this proceeding.

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<sup>268</sup> Ex. WPA-1 at 2; Ex. CAX-137.

<sup>269</sup> Ex. WPA-1 at 2; Ex. CAX-137.

<sup>270</sup> Ex. CAX-260 at 148 tbl.14 (Price Correction and Refunds for Energy Exchange Sales Through the ISO) (revised Mar. 26, 2012); Tr. at 2181:18-2182:10.

<sup>271</sup> Ex. CAX-260 at 148 tbl.14 (Price Correction and Refunds for Energy Exchange Sales Through the ISO) (revised Mar. 26, 2012).

<sup>272</sup> *Id.*

## PART 4

### RESPONSES TO SELECT ARGUMENTS OF STAFF AND RESPONDENTS

#### I. Staff

153. Staff maintained an adversarial posture in this case against the Complainants and generally supported all of the positions of the Respondents. They adopted most of the Respondents' arguments against the Complainants, except with respect to the sale of ancillary services without market-based rate authority. One argument which Staff particularly initiated concerned the matter of equity. Here, Staff complained that the Complainants themselves had committed many of the violations that are charged against the Respondents and therefore, short of dismissing the claims, no refunds should be allowed. However, neither Staff nor the Respondents presented evidence of the Complainants' violations in order to sustain the "clean hands argument." In any event, the Commission did not require that refunds be calculated for the Summer Period, but only directed that a finding be made with respect to acts of violations of the Respondents and their associated price effects. The equity argument is better made in subsequent stages of this proceeding when the amount of refunds is at issue for the Summer Period.

155. Further, Staff complains that Dr. Fox-Penner's price effects analysis with respect to overscheduling only shows upward increases in prices and not any downward decreases in prices. Dr. Fox-Penner testified that he did not consider downward price effects. However, the Commission specified in its mandate that it only wanted to know which violations had a price effect on the market clearing price. The Commission did not specify that the price effects achieve a certain amount or be positive or negative. In this respect, Staff's argument may be appropriate when this case transitions to the refund stage where arguments to justify reduction of refunds are more appropriate, but not at this point when the issue is limited to the identity of violators.

#### II. Respondents

156. The Respondents' experts spoke on various general aspects of the economic conditions in the West during the California Crisis Period, and the Summer Period in particular. They asserted that generation shortages and high demand explain the high prices, even though on some days the prices were over 900 percent above normal rates.<sup>273</sup>

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<sup>273</sup> See Ex. CSG-1 at 110 (revised Apr. 3, 2012); see also CAX-001 at 23 fig.II-1 (revised).

However, they provided no discussion of whether gaming activity had anything to do with the problem. Under cross-examination Dr. Fox-Penner, one of Complainant's experts was challenged for his opinions in an article<sup>274</sup> that he had co-authored in June 2001. In this article he accepted the proposition, as did most observers at the time, that natural economic forces brought on by the reorganization of the market were responsible for the high prices. However, until the Enron memorandum was leaked in May 2002,<sup>275</sup> most serious observers were not aware that the CAISO was being manipulated by the price raising schemes of marketers. They instead defaulted to accepting the usual suspects of economic malaise, that something must be wrong with the natural economic forces. The Respondents' experts provided no discussion of these Enron strategies and their relationship to the high prices that had persisted.

157. Some experts of the Respondents extolled the virtues of arbitrage, which the Commission has often said is acceptable market behavior. In the sequential markets in the CAISO, the Respondents did admit arbitraging the price differentials between the day ahead market, hour ahead market, and other products within the CalPX and the CAISO. However, the issue in this case is not arbitrage, but discrete acts of tariff violations. Arbitrage is permissible but not when achieved by way of tariff violations. For all of these reasons, the evidence of the Respondents' experts received little weight with the regard to the factual findings that the Commission had required for the Summer Period, namely to identify tariff and other violations by the Respondents.

158. The Respondents and Staff also argue that all of the witnesses for the Complainants, while presented as experts, lacked firsthand knowledge and expertise in engineering, or managing the grid, and even criticize their failure to consult with the Respondents' engineers and managers before forming their opinions. Therefore, they argue that the Complainants' witnesses were not as "superior" as the Respondents' witnesses, some of whom were on-site managers and engineers of facilities and marketing units. However, analyzing CalPX and CAISO data and methods to identify transactions that connote anomalous market behavior does not require engineering or managerial expertise. Therefore, the Complainants' witnesses were given more weight and found to be relevant to the issues that the Commission has mandated for this case.

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<sup>274</sup> Ex. BPA-66.

<sup>275</sup> Gaming Order, 103 FERC ¶ 61,345 at P 34.

### III. APX

159. A separate argument is offered by APX. They argue that the only claims against them involve false load scheduling and that they only acted as a middleman, submitting the schedules of third parties. These relationships required APX to submit schedules to the CAISO on behalf of approximately 37 customers. The schedules submitted by APX were aggregate or net schedules that were developed from the schedules that APX received from customers. Customers submitted schedules to APX, and APX processed and aggregated those schedules for submission to the CAISO. The argument continues that APX therefore committed no violations on its own behalf and had no knowledge of any false information from its customers.

160. With respect to this argument, the Commission has demonstrated an inclination to consider reducing the refunds owed by APX, but not absolving them of liability for refunds. Considering that APX was the Scheduling Coordinator for the sellers that it represented, the Commission has determined that this unique situation requires APX and its sellers to be held jointly and severally liable for refunds where the refund liability cannot be apportioned based on the specific transactions conducted by an individual seller.<sup>276</sup> Therefore, when the Commission considers refund after determining the tariff violations that APX had scheduled, APX may at that time present its argument for a reduction of any refund that it may be assigned.

### IV. CARE

161. CARE, a public interest group, submitted a reply brief. CARE basically adopts Staff's position that the Complainants themselves are violators of many tariff provisions. Further, CARE supports BPA and WAPA on their position that the exchange transactions during the Refund Period have been mitigated and require no further mitigation. These arguments are addressed above in this Initial Decision.

### V. Salt River Project Agricultural Improvement and Power District

162. Salt River takes the position that it is a non-jurisdictional utility in Arizona and a net buyer during the Crisis Period and therefore should the Commission determine that refunds are owed by the Respondents for any portion of the Crisis Period, Salt River

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<sup>276</sup> *San Diego Gas & Elec. Co. v. Sellers of Energy & Ancillary Servs.*, 127 FERC ¶ 61,269 at P 272 (2009).

should receive their appropriate share of the refunds. This Initial Decision makes no finding with respect to this issue.<sup>277</sup>

## **VI. Conclusion**

163. The omission from this Initial Decision of any argument or portion of the record that was raised by the parties and participants in their briefs does not mean that these items were not considered. All facts and arguments were given due consideration.

## **ORDER**

164. It is ORDERED that, subject to review by the Commission on appeal or on its own motion, this Initial Decision shall be of full force and effect within 30 days of the date of this order.<sup>278</sup>

Philip C. Baten  
Presiding Administrative Law Judge

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<sup>277</sup> On February 6, 2013, Salt River filed an Election to Become an Additional Settling Participant to the settlement referenced *supra* note 26. This Initial Decision reserves for the Commission the authority to consider the effects of this Election on the final relief ordered for Salt River.

<sup>278</sup> See generally 18 C.F.R. §§ 385.708(d), 711(a).



Document Content(s)

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